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AIR CONDITIONING AND REFRIGERATION News

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INSIDE DOPE

by GEORGE F. TAUBENECK

Exposition Lagniappe
Beauty and the Beasts
We Play in a Tough League
It's About Time

Exposition Lagniappe

The fellows who really do the work around here have done such a remarkable job of reporting the All-Industry Exposition that there's little more Dope can say about that hugely successful undertaking except to add a few random sidelights.

Best thing we can note is that it inspired everybody. It gave a tremendous lift to the spirits of exhibitors and registrants alike. In visual form we could all see something of the vastness of the industry, and glimpse its potentialities.

Even the cleaning women were impressed, as W. G. Von Meyer of Copeland can prove. Von had a nickel-in-the-slot "peep show" in the Copeland exhibit. For nickels which he supplied, customers could peep through a small opening in a shrouded box and watch a Copelametic compressor in action. Every night Von would empty the nickels from the container; and every morning he'd find half a dozen or so new nickels in it. The cleaning women couldn't resist looking!

Beauty and the Beasts

Realizing that Mel Knight would draw crowds to his booth with his stunning Miss Peerless, a number of exhibitors decided to afford him some competition. Inasmuch as few men are too old or too stodgy to enjoy looking at pretty girls, the result was most gratifying.

Dope didn't get all their names, but he tried. (Can't blame a guy for trying, y'know.) Jack & Heintz presented Mary Dublin ("an old friend of the family" the lads insisted) and Al Chadburn of A.S.R.E. displayed Margaret Sparka, who (sh-h-h) will soon marry a man in the industry.

Airserco's Mrs. E. C. Williams, a gorgeous blonde who is a radio actress, drew lots of attention, as did Coolstream's Mrs. Lyonel Berken, a petite brunette with a pair of eyes that must be seen to be believed. Vistors to the Ansul booth were greeted by a charming *svenskaflicka* who pinned on boutonnieres with a very special touch.

Nor did the four pin-up girls in the NEWS booth lack for attention. Every few minutes a thudding crash would occur in the aisle which fronted our exhibit. Two men hurrying in opposite directions would collide because they were craning their necks for a better view instead of looking where they were going.

The one girl we all wanted to meet, however, didn't appear. She is the brand new Mrs. H. T. McDermott. Chicago friends of the popular R.S.E.S. secretary all agree that she's a honey.

We Play in a Tough League

Publishers who must deal with entrenched A. F. of L. Typographical Unions may be pardoned if they yawn a bit while their advertisers rant about the high cost of labor. Quietly and without fanfare, by perpetuating a continuing shortage of men skilled in their craft, the Typographers can claim a championship in the Knights of Labor League. Look at this:

The contract between the Printers League Section of the New York Employing Printers Association, Inc., and the New York Typographical Union No. 6 has a clause providing that the contract may be reopened by either party for adjustment of wages only on Nov. 15, 1946.

Accordingly, on Sept. 14, 60 days prior to this reopening date, the union served notice on the Printers League

(Concluded on Page 9, Column 1)

NARC Studies Test Case on Wages-Hours

By John Sweet

CLEVELAND—The National Association of Refrigeration Contractors will investigate the possibility of starting a test case in a Federal court to attempt to prove that commercial refrigeration contractors engaged in intrastate business are not subject to the so-called "Wages and Hours" law.

The Association also will prepare a code of ethics and business procedure for the refrigeration contracting industry "in order to further cleancut, sound, and constructive business practices."

These are two of six actions taken by the board of directors during the Association's first annual convention in the Hotel Allerton Oct. 28 and 29. More than 300 registered for the sessions which were held concurrently with the All-Industry Exposition.

Directors also authorized NARC to:

1—Prepare a paper outlining the advantages and disadvantages of a licensing regulation in any state or community either as a part of or separate from a safety refrigeration code.

2—Urge members to notify NARC headquarters of any city or state where a licensing regulation or code is being considered or proposed, and to forward copies.

3—Notify the Office of Price Administration that all OPA regulations affecting refrigeration contractors should be decontrolled.

In addition, the board appointed Gerald W. Weston executive vice president.

The Association elected these officers: Warren W. Farr, Cleveland, president (reelected); E. S. Wright, Youngstown, Ohio, first vice president; J. F. Park, Los Angeles, second vice president (reelected); Nathan Edelstein, New York City, recording secretary; and A. M. Palen, St. Paul, treasurer (reelected).

Four directors were reelected: L. C. Anderson, River Forest, Ill.; W. L. Drake, Indianapolis; W. G. Euth, Detroit; and C. R. Faulkner, Longview, Tex. Two new directors were

(Concluded on Back Page, Column 1)

'10-Week Delivery on Plates, Not 10 Months'

LANSING, Mich.—Deliveries on plate evaporators are actually much better than the dairy industry apparently believes, reports E. A. Thiele, vice president of Kold-Hold Mfg. Co. In a symposium on the supply situation conducted by International Association of Ice Cream Manufacturers at the recent Dairy Industries Exposition in Atlantic City, N. J., speakers declared that plate deliveries required 10 to 18 months.

"Ten weeks is more likely, and I think this goes for everybody," Mr. Thiele wired the NEWS.

Ward R. Schafer Heads Ideal Industries Sales

SYCAMORE, Ill.—Ward R. Schafer, nationally known electrical appliance sales executive, has been named general sales manager of Ideal Industries, Inc., manufacturer of electrical and mechanical industrial equipment, it is announced by J. Walter Becker, president of Ideal.

Mr. Schafer left his post of vice president in charge of Edison General Electric ("Hotpoint") Appliance Co. in Chicago for the new position, Nov. 1.

Except for two years when he supervised construction of a $6,000,-

(Concluded on Page 4, Column 5)

Bigger Discounts on Small Appliances Asked by Dealers

CHICAGO—Dealer discounts, especially in the small appliance and radio fields, are still too small, according to some hundred electrical appliance dealers who participated in an open forum discussion at the first meeting of the National Electrical Retailers Association held since the war.

A broad program of activities is being developed by N.E.R.A., according to C. C. Simpson, managing director, who announced that an appliance trade-in guide book will be issued soon.

In addition, the association will work for "clarification of factory guarantee programs on major appliances; sponsorship of testing laboratories to test household electrical appliances and endorse performance requirements of those appliances; and urge all individual manufacturers to establish suggested list prices on appliances," announced Mr. Simpson.

A strong cooperative program between utilities and retailers will be sought on salesman training, market surveys, consumer instruction, he declared, adding that dealers themselves will be asked to charge for service calls beyond guarantee periods, eliminate employe discounts for other than their own employes, and use time payment plans conforming to present practices.

Wholesalers will also be asked to stop selling direct to consumers, particularly through block sales of appliances to contractors and lumber companies, according to Paul Kees, N.E.R.A.'s new president.

Town of 2,240 Receives 44 Refrigerators In '46

ORD, Neb.—A survey made by the *Ord Quiz*, local weekly newspaper, shows that 44 electric refrigerators have been delivered by local appliance dealers this year to residents of this community of 2,240 populationn.

Other appliances delivered to date this year included 276 radios, 61 washing machines, 31 electric mixers, 18 electric hot water heaters, 90 oil heaters, 13 kitchen ranges, and 12 stokers.

Household Vacuums, Ironers, Clothes Dryers Decontrolled

WASHINGTON, D. C.—Price controls on household vacuum cleaners, ironing machines, and clothes dryers were dropped by OPA on Nov. 7.

Exposition Revealed Vast Industry Growth

The greatest industry show in the history of the commercial refrigeration and air conditioning fields has just passed into history. The job of reporting the new products and developments presented in the more than 200 exhibits, and in covering the meetings of the seven associations that were held in Cleveland during the time of the show, is a tremendous one.

The editors of the News are proud of the job the staff has done in covering this event. BUT, we simply can't get it all into one issue, so if you fail to see mention of some new development, or miss the story on some particular group, please bear with us until the next weekly issue of the News appears.

Pictures of the show and meetings are published on pages 2, 6, 10, 18, 19, and 23. Descriptions of the products displayed in the exhibits will be found on pages 7, 11, 15, 17, 20, and 21.

More than 20,000 In Display Halls to View Million-Dollar Show

By the Staff

CLEVELAND—The first postwar All-Industry Refrigeration & Air Conditioning Exposition is over, and the verdict on it is simple: it was the greatest show ever to be held for the commercial refrigeration and air conditioning fields, and it was possibly the first comprehensive representation of the tremendous scope of the applications of refrigeration and air conditioning.

Here are some of the facts and impressions from the Show:

Probably more than 20,000 persons entered the exhibition halls of the Cleveland Auditorium. Actual figures were hard to obtain, because there was considerable preregistering by the various associations which met in conjunction with the Show.

But here are some facts submitted by employes of the Cleveland Auditorium, who have no particular interest in the industry. The jam on opening day, they said, was the largest they had seen for any show. They believe that the desk registration on the second day was the largest they had ever recorded for any trade show ever held in the Auditorium.

The overwhelming success of the All-Industry Exposition has prompted the Refrigeration Equipment Manufacturers Association to announce that the next and FIFTH show will again be held in the Cleveland Auditorium probably in the latter part of January, 1948.

The connected power load to operate the more than 200 exhibits was the second largest in the Auditorium's history. There were 1,400 pieces of equipment in operation, requiring 3,000 hp. Of equipment displayed but not operating, there were 3,700 pieces. Total cost of the displays and exhibitor participation was estimated at $1,000,000.

What did the Exposition indicate in the way of demand for commercial cooling equipment and components? Generally, it revealed that there is still a tremendous backlog of demand for almost all products in this field—at least among resellers of the products. There were a few dealers and contractors who reported a slowing down of the demand among the ultimate buyers, but some of this was said not to be a reduction in the actual demand as much as an inclination to wait for a possible break in prices.

The reaction of one manufacturer of a cetrain type of commercial evaporator, who entered the Show at the last minute, gave somewhat of a clue to the general picture. So swamped was he with orders taken during the Show, that he made plans on the spot to expand his production facilities five-fold, and before the Show had even concluded, had sent out members of his staff to procure added manufacturing facilities.

Another manufacturer reported that "the orders pressed into our hands at the Show will give us three months of trouble."

"There has been a tremendous sales interest. I've never seen anything like it. The volume of business is

(Concluded on Page 4, Column 1)

Regulation W Splits NRDGA Credit Men

NEW YORK CITY—Divergence of opinion among credit management officials of the nation's retail stores over the question of retention of the Federal Reserve Board's Regulation W, controlling credit purchases, was disclosed at the annual meeting here of the board of directors of the Credit Management Division of the National Retail Dry Goods Association.

Although the board declared itself overwhelmingly for immediate abolition of the regulation, especially in so far as it concerns charge accounts, it decided to make no recommendation to the Federal Reserve Board because a majority of the general membership of the Credit Management Division favor retention of the regulation wholly or in part.

(Concluded on Page 4, Column 5)

Sherer-Gillett Elects Bower Vice President

MARSHALL, Mich. — The Sherer-Gillett Co. has announced the election of L. O. Bower as vice president in charge of sales.

Mr. Bower has been associated with the company for the past three years, the last two of which were in the capacity of sales manager.

Packaged, Refrigerated Perishables Seen Competing with Canned Goods Markets

By George M. Hanning

DETROIT — "During the next 10 years all perishable foods will be prepackaged in consumer sizes and sold on a self-service basis through refrigerators that give the same convenience in shopping as is given canned goods," declared Ed Behnken, divisional manager of Hussmann Refrigeration, Inc., at the November meeting of the Detroit chapter of the American Society of Refrigerating Engineers.

"It is also our belief," he added, "that the cost of distribution of these perishable foods packaged on a production basis will be reduced to a point that they will give very serious competition to non-perishable foods. This will result in more and more perishable food consumed by the American public."

Supporting these beliefs, Mr. Behnken pointed out that "eight years ago most store owners, both large and small, did an average of about 40% of their volume in perishable food sales."

"Today," he added, "these storeowners are laying out their stores and purchasing equipment with the idea of doing at least 60% of their store volume in perishable foods. This 20% increase in perishable food consumption will require a tremendous amount of refrigeration equipment of all types."

He mentioned specifically self-service refrigerators for both perishable and frozen food, equipment for processing rooms and storage facilities, refrigerated cars and trucks, retail store storage, and large refrigerators in the home.

In his talk, Mr. Behnken outlined the development of perishable food merchandising through the specialty store to the large chain super mar-

(Concluded on Back Page, Column 4)

RSES May Name Full-Time Educational Director As Intensified Program Begins

Group Bans Discussion of Employer-Employe Relationships at Chapter, Regional Meetings

By George M. Hanning

CLEVELAND—A record gathering of refrigeration service engineers voted to intensify the educational activities of their society at the conclusion of the ninth annual convention of the Refrigeration Service Engineers Society in Cleveland Oct. 26 to 29.

Secretary H. T. McDermott declared that, "The R.S.E.S. is going to conduct an aggressive educational program and in all probability will hire a full time director in the near future."

Such a step was strongly urged by Mr. McDermott, Paul B. Reed, chairman of the educational committee; and retiring president Clarence Buschkopf at earlier sessions.

The Society's board of directors agreed to launch the program.

A resolution to ban discussion of such controversial subjects as employer-employe relations at chapter and regional meetings was also voted on and passed by the membership.

Secretary McDermott had pointed out in his report at the convention's opening meeting that both employer and employe found a common meeting ground in the Society through their interest in the Society's educational program and therefore "it does not permit the discussion of such subjects that may eventually lead to controversial subjects where they might interfere with the harmonious relationship that should exist between all groups."

At its annual election of international officers, R.S.E.S. named W. W. Allison of Los Angeles as president for 1947. Also elected were: William Marshall of Leaside, Ontario, first vice president; Charles Harris, of Cambridge, Mass., second vice president; C. J. Doyle of Omaha, Neb., treasurer; and J. L. Driskell of Burley, Ida., sergeant-at-arms. Mr. McDermott was re-elected secretary.

Mr. Buschkopf, who has served as acting president for the past 18 months, was voted full president just before his term expired.

Elected to the international board of directors were: T. L. Burroughs of Texas, Walter Booth of Virginia, Ned Brossoit of Quebec, A. L. Robertson of Wisconsin, C. S. Tucker of Alabama, Charles Yates of Washington, and Earl Yockey of Ohio.

At the convention's opening session, Secretary McDermott told the service engineers that their association was "the largest refrigeration association in the world."

He listed the group's membership at 7,283 members. Of these 215, or 3%, are certificate members; 5,853, or 80%, are active members; 733, or 10%, are associate members; and 482, or 7%, are junior members.

The Society has 109 local chapters in the United States and Canada, with six under formation, Mr. McDermott reported.

He also reported that the Society's international board of directors had recommended a plan to give regional, state, and interprovincial service engineer associations representation in the International Society.

At the annual banquet held in the Hollenden hotel, Warren Farr, a retiring member of the board of directors, presented William Kovick, a member of the fledgling Medina, Ohio, chapter, with a plaque for the best slogan entered in a state wide contest. Mr. Kovick's slogan "For better knowledge through mutual experience and understanding" won over 600 other entries.

$4 Million Hecla Copper Tubing Plant OK'd by CPA

WASHINGTON, D. C.—A $4,165,000 project for the erection of a copper tubing plant by Calumet & Hecla Consolidated Copper was among 38 new applications for non-housing construction recently approved by the Facilities Review committee of the Civilian Production Administration.

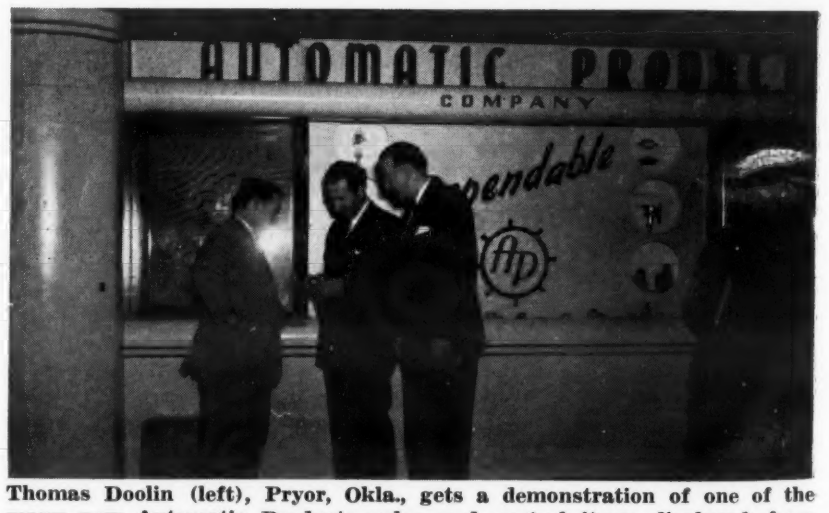
Two other projects included in the latest CPA approvals are: a $150,000 plant for the storage and packing of food by United Grocers, New York City, and a $124,000 cooperative dairy and cheese plant to be erected by the Friendly Valley Co-op Dairy at Osceola, Wash.

As First Postwar Show Got Underway

(All photographs on this page by Irving Alter, the Harry Alter Co.)

Executives of the Heat-X-Changer Co. strip off their coats to set up for the first showing of their new line of cast aluminum water and beverage coolers. L. to r. are H. Schmidt, Cecil Boling (president), T. K. Campbell, Joe Corbin.

General Electric introduced a new line of open-type commercial condensing units, in sizes from ⅛ to 1½ hp. Putting finishing touches on the exhibit are S. A. Durbin, S. K. Culver, R. E. Lindblom, and G. E. Simons.



Thomas Doolin (left), Pryor, Okla., gets a demonstration of one of the many new Automatic Products valve and control items displayed, from Don Tmey and Del Moerick.

Standard Refrigeration Co.'s line of replacement household evaporators and commercial coils is demonstrated by Russell Cook (left) to A. D. Halsey, Jr., Allen & Webb Co., Charleston, S. C., and R. R. Levin, Chicago.

The friendly "tug-of-war" over a coil of the still-hard-to-get copper tubing is between R. D. Marshall (left) of Albany, N. Y., and M. B. Allan, American Brass Co., who had the temerity to put the tubing on display.

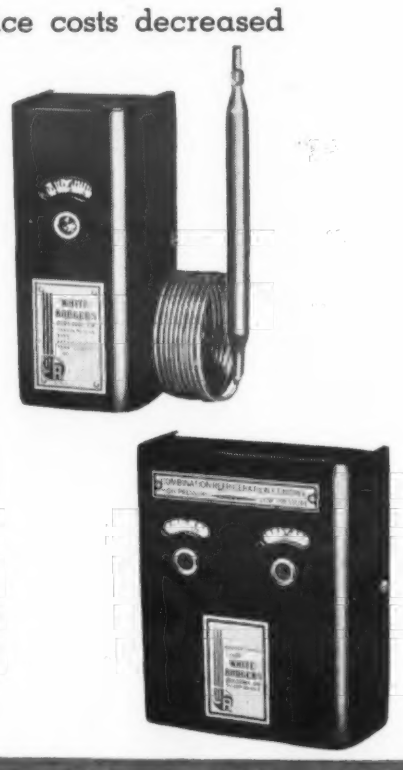
If your service costs seem to be increasing out of all proportion

ELIMINATE THEM AT THE START

WHITE-RODGERS automatic controls cut service costs. This has been proved by manufacturers who have kept accurate records.

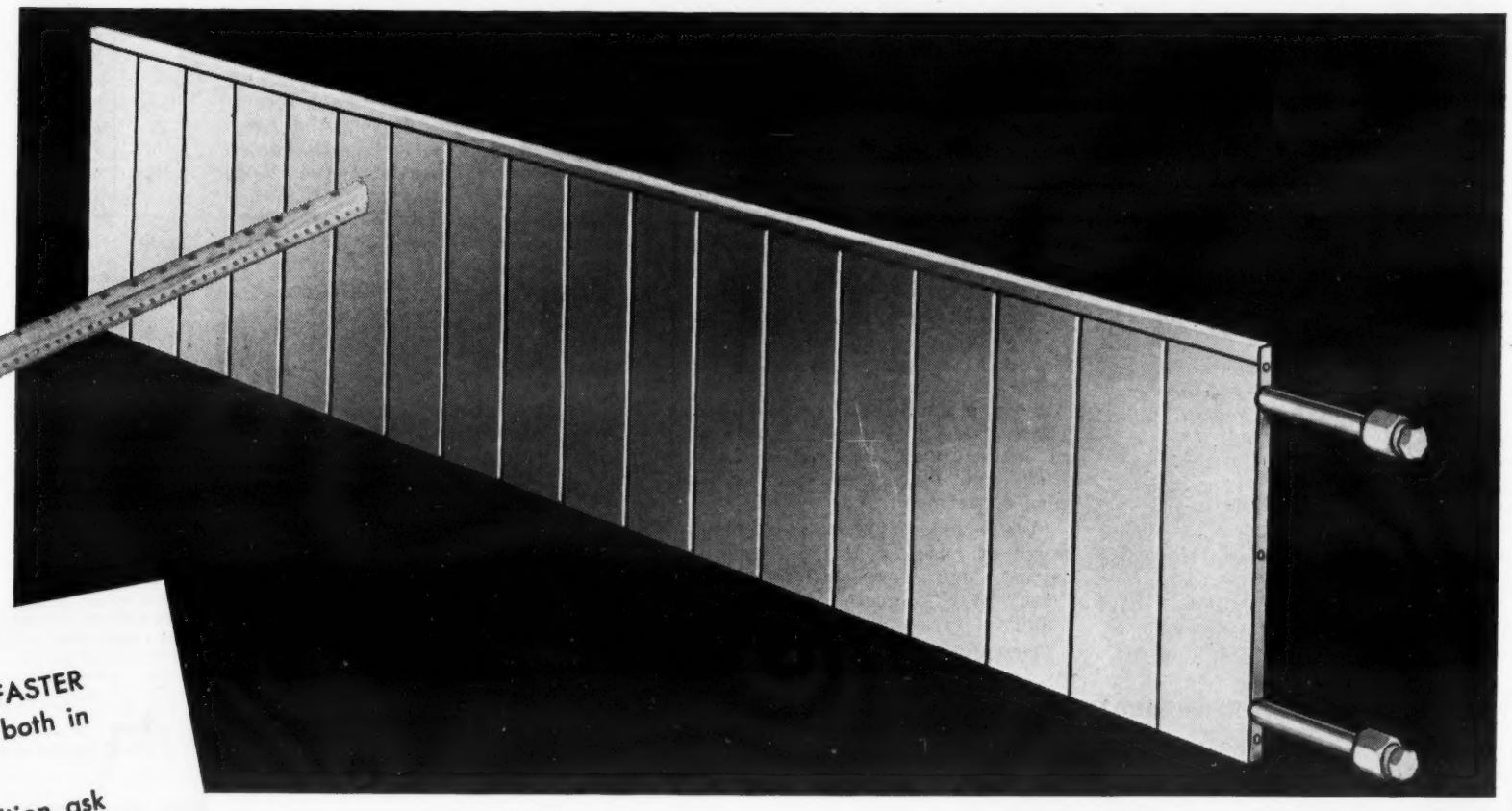
One typical manufacturer found that his service costs decreased far more than his original control costs increased. Not only that, but his equipment kept working more dependably, resulting in better-satisfied customers, and a better reputation for his firm.

If your products depend for their accuracy and reliability on temperature or pressure control, equip them with White-Rodgers automatic controls.



WHITE-RODGERS ELECTRIC CO.
ST. LOUIS 6, MISSOURI
Controls for Refrigeration • Heating • Air Conditioning

Sensation of the CLEVELAND EXPOSITION



It is called the "FLASH PLATE" because it is FASTER freezing — operates cheaper — costs less, both in operation and maintenance.

If you did not visit the Cleveland Exposition ask your PEERLESS representative or wholesaler what this new FLASH PLATE can do to help you make better product or installation.

DELIVERIES? ——— YES!

PEERLESS is PRICELESS in QUALITY

PEERLESS FLASH PLATES are available for —

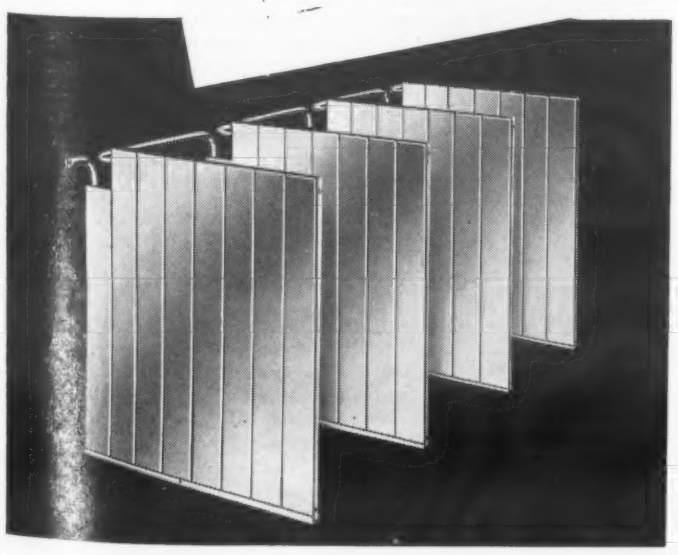
Display Cases
Store and Window Displays
Food Counters
Salad Pans
Shelf Plates for Fast Freezing
Soda Fountain Conversions
Truck Refrigeration
Farm Freezer Cabinets
Home Freezer Cabinets
Walk-In Coolers
Locker Plants
Ice Cream Cabinets
Milk Can Coolers
Beverage Cooler Applications
Frozen Food Processing and Storage Plants

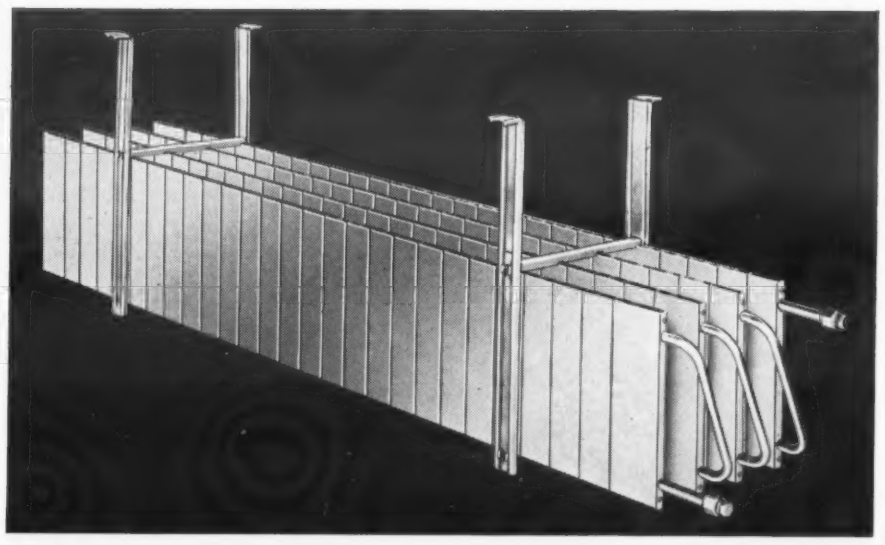
SOLD THROUGH LEADING REFRIGERATION SUPPLY WHOLESALERS

THE NEW PEERLESS "FLASH PLATE"

A flat, freezing surface constructed of non-corrosive aluminum plate mechanically bonded together by copper or aluminum tubes which provide the refrigerant circuit.

The NEW PEERLESS challenge to the requirements of that potential giant —the low temperature, frozen food field—was the introduction of the ALL-NEW, ALL-PURPOSE FLASH PLATES at the Cleveland Exposition which once more demonstrated the ability of PEERLESS, long a pioneer in the refrigeration industry, to meet the requirements of the most exacting buyers. Incorporated are engineering improvements which insure top performance.





These illustrations show PEERLESS FLASH PLATES as banks for locker storage, etc.

THOUSANDS saw and admired the gleaming beauty of this new freezer surface.

THOUSANDS felt and lifted this modern, weight-saving, efficient zero and sub-zero producing plate.

And the ANSWER was —
"IT'S PEERLESS AGAIN!"

PEERLESS of AMERICA, Inc.

General Sales Offices . . . 2901 LAWRENCE AVE., CHICAGO 25, ILLINOIS

Exposition Revealed Vast Growth--

(Concluded from Page 1, Column 5)

amazing," said Edric F. Brown, manager of Pacific Lumber Co.'s By-Products Division.

"Product acceptance has been very excellent. In fact, it exceeded our expectations," declared K. M. Newcum, vice president in charge of engineering for Superior Valve & Fittings Co.

"Interest in the Show is much better than we expected," reported E. E. Jackson of Midwest Metal Stamping Co.

"Sales are very good. It's really surprising to see the interest shown," said a manufacturer of refrigerator hardware.

"Sales at the Show have been marvelous, if you mean 'taking orders,'" reported C. H. Benson, manager of the refrigeration division, Imperial Brass Mfg. Co.

"Dozens of wholesalers have been ordering our new dryer and oil separator, and it's been very good to have a lot of service men come in and tell us they use our products," said Ed Kellie, American Injector Co.

"During the Exposition we've had very favorable comments on our valves, especially the new items brought out at the exhibit. From advance interest shown in these new items we can foresee great expansion of our production and the whole refrigeration field," said R. W. Mueller, Jr., advertising manager, Kerotest Mfg. Co.

"A high degree of interest has been shown, particularly in our new models," declared B. D. Maseritz, manager, manufacturer sales section, General Electric Co.'s Air Conditioning Department, Bloomfield, N. J.

"The Show is a resounding success and the best we've ever attended," declared Hugh D. Smart, assistant to the president of Refrigeration Appliances, Inc.

"The visitors attending the Show are not curiosity seekers, they're here for a purpose," emphasized S. Ellison, sales manager of Perfection Refrigeration Parts, Inc.

"We feel that the Show is a huge success. We've seen all the people we wanted to see. We have never seen anything better than this Show," said a manufacturer of lockers.

"A number of prospective customers have been lined up as a result of our exhibit. We've had very good success." This from a manufacturer of food freezing equipment.

"The Show is advantageous for everybody concerned," commented G. L. Brunner, Jr., president of Brunner Mfg. Co.

"We found that the Show has been very good for us as a means of keeping our locker plant program in view of dealers and users who are increasing, or planning to increase, their plants," said J. A. Smith, who heads up locker plant and farm market sales for Frigidaire's commercial sales department.

"We've done $50,000 to $100,000 worth of business at the Show—far beyond our expectations"—Larry Platt of Complete Refrigeration Supply.

"Demand for our products has been very good."—Arley Baker of Alco Valve.

"Response to our exhibit has been very enthusiastic"—officials of Dorsey Zero Transport Co.

"There has been a very great interest in our products"—Norge officials.

"This is the first time that we have exhibited in the All-Industry Show and we are suprised to see so many of our customers from the west coast here"—Eston Chemicals.

"We have taken orders way beyond our expectations"—Electric Glass Co.

There were those who had some criticisms to make. They were of the following nature:

Louis Uhring, past president of National Frozen Food Locker Association, expressed sentiment of members when he pronounced the housing facilities in Cleveland to be very disappointing. He felt that the All-Industry Show was too big to assure accommodations for the convention, too.

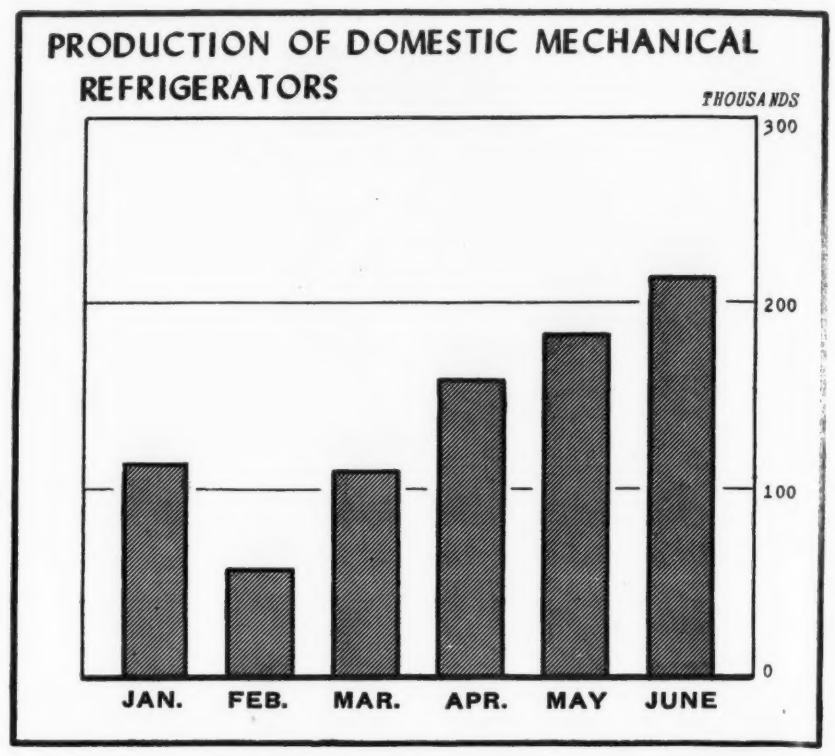
This group voted to hold its 1947 convention in Kansas City "all by itself."

Some people at the show said that it was too big. It took too long to get around and see everything on display.

Others expressed surprise at the size of the industry. They had not realized that it had grown to such proportions.

A Cleveland service man said he felt lost in his own home town. The show was too big, he felt.

"There were too many divergent groups here," said a representative of a complete unit producer. "The Show would be better if broken up by groups."



Domestic Mechanical Refrigerators: Production, Shipments, and Stocks, January-June 1946

Model Size	Total	January	February	March	April	May	June
Production (No.)	837,648	113,712	57,539	110,395	159,390	183,002	213,610
7.00-7.99 cu. ft...	578,117	78,337	43,646	84,564	103,044	115,676	152,850
6.00-6.99 cu. ft...	122,057}*				∫	20,748	32,049
All other sizes..	137,474∫	35,375	13,893	25,831	56,346}	46,578	28,711
Shipments (No.) .	820,987	100,701	64,609	106,667	143,351	195,934	209,725
7.00-7.99 cu. ft...	568,137	70,877	44,043	82,937	99,846	121,061	149,373
6.00-6.99 cu. ft...	118,833}*				∫	27,374	29,069
All other sizes..	134,017∫	29,824	20,566	23,730	43,505}	47,499	31,283
Shipments (value in dollars)	79,974,482	9,532,727	6,007,624	9,693,475	13,712,198	20,016,488	21,011,970
7.00-7.99 cu. ft...	54,102,673	6,618,239	4,046,127	7,327,610	9,278,243	12,066,258	14,766,196
6.00-6.99 cu. ft...	11,325,905}*				∫	2,742,270	2,690,243
All other sizes..	14,545,904∫	2,914,488	1,961,497	2,365,865	4,433,955}	5,207,960	3,555,531
Stocks at end of month (No.) ...	.....	28,927	21,857	25,585	41,624	28,692	32,577
7.00-7.99 cu. ft...	.....	15,758	15,361	16,988	20,186	14,801	18,278
6.00-6.99 cu. ft...	.....}*					∫	8,066
All other sizes..	.....∫	13,169	6,496	8,597	21,438	13,891}	6,233

*Combined to avoid disclosure of the operations of individual companies.

* * *

821,000 Boxes Shipped In First 6 Months of 1946

WASHINGTON, D. C.—Shipments of domestic mechanical refrigerators during the first six months of 1946 totaled 821,000 units valued at $80 million, according to a report released by the Bureau of the Census. After dropping sharply (36%) in February, shipments gained rapidly in each succeeding month so that in June they were more than twice as high as in January.

In the first half of 1946 almost 70% of all refrigerators shipped were between 7 and 7.9 cu. ft.

Monthly production, except in February, rose steadily throughout the first half of 1946. June production reached a postwar high of 214,000 units.

The total output for the first half of 1946 was 838,000 domestic mechanical refrigerators.

Since monthly shipments and production corresponded very closely during this period, factory stocks remained low. At the end of June, factory stocks amounted to 33,000.

NRDGA Split--

(Concluded from Page 1, Column 4)

J. Gordon Dakins, manager of the division, predicted, however, that on charge accounts Regulation W "will be out of the window by the turn of the year." He added the forecast that the entire regulation would lapse, item by item, as the supply of goods becomes completely adequate.

An informal poll of the division's board resulted in a 16-to-6 vote for rescinding the regulation. Several New York City retail executives, attending as guests, participated in the poll. The majority in favor of rescinding was somewhat smaller in connection with the regulation of instalment accounts than it had been where charge accounts were concerned.

Mr. Dakins disclosed that a questionnaire answered by 152 stores in all sections of the country showed 61% did not want Regulation W abandoned now. Their reasons indicated this group would prefer to have it modified rather than abolished now, he said. A substantial number also felt that the regulation assisted smaller shops in meeting competition of the larger ones on credit terms.

The survey indicated, Mr. Dakins said, that those favoring abolition "want the government out of business and feel that with other controls falling, this would be a good time to free credit."

Schafer Named--

(Concluded from Page 1, Column 2)

000 power plant for the Defense Plant Corp. in connection with the government synthetic rubber program, Mr. Schafer has served with Hotpoint since 1924. His first job was in engineering design; later he went into the sales division and advanced steadily to his appointment as vice president in March, 1945.

Ideal Industries, an outgrowth of a business started by Mr. Becker in Chicago 30 years ago.

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SUCTION and DISCHARGE
VALVE, DISC, REEDS and SPRINGS
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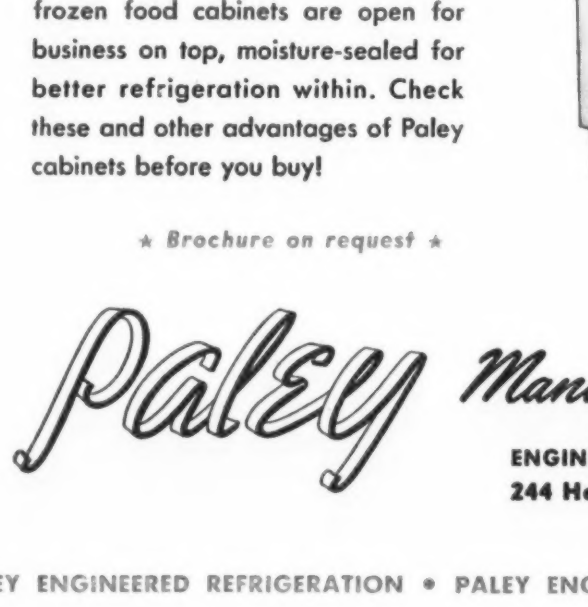
Paley Manufacturing Corp. BROOKLYN 16, N. Y.

...for Greater See-Ability Sell-Ability!



Package-laden shoppers buy more when frozen foods are easily accessible! No unwieldy lids, selection is simple, customers can see all the stock. Food dealers, too, can see that Paley engineered refrigeration combines solid construction with compelling, selling display.

Double display, double service for customers — extra sales, extra profits for the food dealer! Paley frozen food cabinets are open for business on top, moisture-sealed for better refrigeration within. Check these and other advantages of Paley cabinets before you buy!

★ Brochure on request ★

Paley Manufacturing Corporation

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Navy Shakedown Cruises Will Test Effect of Two Types of Air Conditioning Systems

WASHINGTON, D. C.—Air conditioning equipment utilizing high speed "Freon" compressors and a simplified Navy coil design which is shockproof and easily cleaned will be installed on the 17,000 ton heavy cruiser *USS Newport News* now under construction at Newport News, Va., the Navy department's bureau of ships has announced.

This system will be compared in a series of experiments with another utilizing steam jet equipment and the Navy coil design which will be set up on the cruiser *USS Salem* now under construction at Quincy, Mass.

Both ships are expected to be completed in late 1947, the Navy department said. Except for the machinery spaces, virtually all living and working compartments aboard the new cruisers will be air conditioned.

As previously reported in the NEWS, the Navy is conducting these experiments to determine what type equipment is most efficient for increasing the fighting effectiveness of Navy personnel and improving living conditions aboard ship.

Citing wartime experience, Vice Admiral E. L. Cochrane, chief of the bureau of ships, said, "The fighting efficiency of our fleet is lowered in proportion to the human strain and exhaustion caused by exposing personnel to long periods of abnormal heat.

"There can be no question but that the crew in an air conditioned warship will have a distinct and perhaps a decisive advantage in action with an enemy fatigued and of lowered alertness from living in a ship that is not air conditioned."

Living and berth spaces aboard the *Salem* and *Newport News* will be kept at an "effective" temperature of not more than 78°, Admiral Cochrane declared. He defined effective temperature as representing the combined effect of temperature, humidity, and air movement upon the human body.

The Navy has chosen 78° "effective temperature" as the maximum standard because it is the highest temperature at which a person can remain at rest without perspiring. It is said to be the equivalent to 85° F. at 50% relative humidity.

Without mechanical cooling, the tropical temperature for shipboard berthing spaces was found by the Navy to run as high as 87° effective, which is equivalent to 95° F. at 60% relative humidity.

By comparison, commercial air conditioning apparatus is usually set at 72° to 74° effective for offices, stores, and public buildings where the "at rest" temperature would not be satisfactory, the Navy asserted. This compares to 80° F. at 40% to 50% relative humidity.

During the war, the Bureau of Medicine and Surgery, in cooperation with the Bureau of Ships, investigated the need for shipboard air conditioning and determined the technical requirements for optimum results. Its research clearly established that marked improvement in the efficiency and health of ship's crews would result from use of cooling equipment in living quarters, which would permit more restful sleeping and prevent skin rashes caused by heat and humidity.

Extensive experiments were conducted at the Naval Medical Research Institute, Bethesda, Md., and aboard the *USS Franklin,* aircraft carrier, on her shakedown cruise in the Caribbean.

The Research Institute tests, which simulated conditions on board a ship in tropical waters, were carried out on two groups of volunteers. Both groups worked in hot environments, but one group rested in hot quarters while the other rested in quarters cooled just below the sweating threshold temperature. The studies involved the measurement of 32 physiological and psychological functions. The examination of such diversified functions as sensorimotor performance, various aspects of vision, and the performance of physical work in the heat consistently demonstrated the superiority of the "cool" group.

It was concluded that the principal factor underlying the differences shown by the two groups was the amount of restful sleep. The men in cool quarters slept better, while almost without exception the men in the "hot" group developed heat rash which disturbed their sleep and reduced their efficiency the following days.

Twenty volunteers were selected for the experiments aboard the *USS Franklin,* and continuous measurements were made of the temperature and humidity in their berthing compartment during the cruise. As the ship moved into the warmer climate, almost all members of the crew complained of the heat, of broken sleep, and of feeling tired. Their work output was markedly less as the carrier reached the tropics.

It was concluded that mechanical ventilation, using supply and exhaust fans only, was incapable of producing and maintaining the physiologically acceptable level of 78° F. in the interests of higher operating efficiency for personnel in tropical climates.

Secretary-Treasurer Post at York Goes to E. P. Vanderwicken

YORK, Pa. — Edwin P. Vanderwicken has been appointed secretary and treasurer of York Corp., according to E. A. Kleinschmidt, executive vice president. Mr. Vanderwicken had formerly been assistant to the president of Signode Steel Strapping Co., Chicago, and treasurer of Signode International Ltd. and its subsidiaries.

Dinegar Named Assistant To Eureka Williams V.P.

NEW YORK CITY — Henry A. Dinegar is now associated with the Eureka division of the Eureka Williams Corp. as special assistant to George T. Stevens, vice president and manager, and as export sales manager.

Mr. Dinegar was formerly sales manager of the electrical appliance division of the American Steel Export Co.

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Through the nation-wide network of authorized KEROTEST Wholesalers, you have the benefit of more than a hundred strategically located sources of quick supply.

There is one near you, ready to make quick delivery, offer helpful advice, furnish technical assistance, keep you abreast of latest developments and serve as your own warehouse for bulk stocks.

In effect—for you—KEROTEST facilities are now *everywhere*—through a firm Wholesaler-to-you policy to which the company has wholeheartedly committed itself.

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Some of the Things That Made News at the Industry's Greatest Show

(All photographs on this page by Austin Jones of the Kerotest Co.)

Sterling Smith of Baker Ice Machine Co. looks on as Margaret Sparka of the A.S.R.E. staff perches on the new 75-hp. Baker ammonia compressor designed for heavy-duty applications.

"Miss Peerless" with one of the new Peerless aluminum "flash" cold plates, and Allen P. Livar, the Livar Corp., Baltimore.

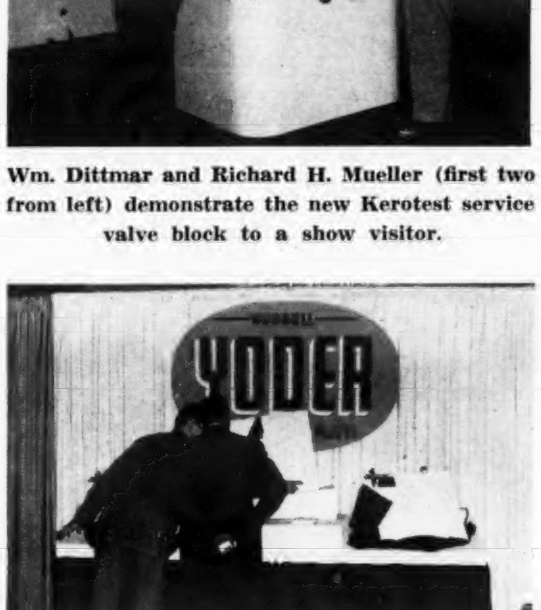
Israel Kramer of the Kramer-Trenton Co. and H. S. McCloud, executive secretary of the R.E.W.A., about to inspect the aluminum walk-in box shown by Refrigeration Corp. of America.

Three Texans inspect the new ceiling mounted unit cooler and some wall models in the Bush Mfg. Co. booth. L. to r. are Allan Cody, Wm. Cody Co., Houston; Paul E. Richards, Rich-Aire, Inc., Corsicana, Texas; and S. L. Weiler, Lamar Equipment Co., Paris, Texas.

Wm. Dittmar and Richard H. Mueller (first two from left) demonstrate the new Kerotest service valve block to a show visitor.

New ice cube maker and service bar in the United Refrigerator Co. line gets the attention of C. W. Koerner and R. S. Wieding of United, and Joseph Fell, Aird-Don Co., Troy, N. Y.

The Green Dragon's "baby" condensing unit got a lot of attention in the Elpeco exhibit. Inspecting it are Gus Larson, Gustave A. Larson Co., Milwaukee; Charles Logan, Elpeco; and Paul Domke, Mueller Brass. This small unit may have many applications in food and beverage cooling and medical refrigerators.



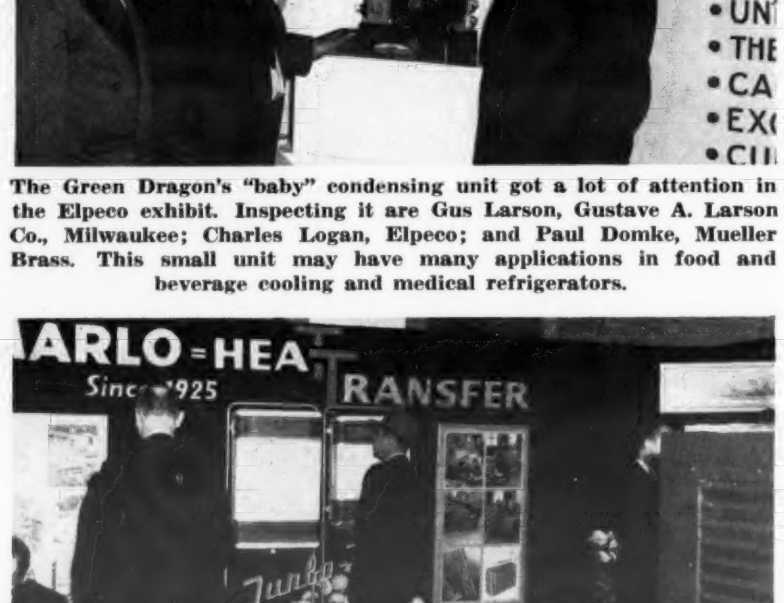
H. Poffenberger of the Chicago office of The Yoder Co. concentrates on a demonstration of the features of a Hubbell-Yoder plate.

Workings of the Servel "Supermetic" condensing unit are viewed by T. W. Giller, Ebco Mfg. Co.; R. H. Ortohoefer, Ebco; John McKinlay, Refrigeration Maintenance Co., Cleveland; Joe Lutz, Servel; and Howard Trace, Refrigeration Maintenance.

Modern design and dress of the new "Turbo-Flo" wall-type panel coolers drew much attention in the Marlo booth.

Paul C. Achenback of Washington, D. C., listens as A. M. Rohr of Stangard-Dickerson Corp. describes features of the new "Stanzero" freezer.

The "Cuberator" continual ice cube maker shown by Panelectric Corp. is studied by Carl Truax, Capitol Ref. Co., Albany, N. Y.; George B. Hermans, Jr., Allied Store Equipment Co., Minneapolis; Larry Johnston, Capitol; and E. Robinson, Panelectric Corp.



John Trix, Jr., and Ed Kellie of American Injector Co. watch the operation of the McQuay Zer-o-Pak combination freezer and cooling unit, designed for locker plants and other food processing plants.

A Carrier Corp. farm freezer gets the once-over from J. W. Witte, past president, Locker Manufacturers & Suppliers Assn.; Polly Thornton, secretary to Assn. Secretary Ray Farquhar; and Larry Warner, incoming president.

Many New Products Introduced At All-Industry Exposition

New Airtemp Sealed Units in 1/6 to 2 Hp.

Chrysler Airtemp chose the All-Industry Exposition as the stage for lifting the curtain on what it calls "a new and revolutionary development in the field of mechanical refrigeration—a balanced line of sealed, radial compressors in the 'smaller' commercial class."

Three other Airtemp products also were shown for the first time in the spacious, four-booth section: a 22-cu. ft. reach-in refrigerator, a 12-case beverage cooler, and a 4-can packaged milk cooler. Dealers were being sent the first units in the reach-in line, which also includes 35 and 45-cu. ft. models.

D. W. Russell, Division president, said the radial-type compressor, an exclusive Chrysler Airtemp development, now has been brought to a new range from 1/6 to 2 hp. The compressor heretofore has been confined to models ranging upwards from 3 hp.

Marking the culmination of years of research by Airtemp engineers, the new compressor will be placed in production as soon as materials and supplies can be obtained in proper volume, Mr. Russell stated. It will be produced in two, four, and six-cylinder models, operating at 1,750 and 3,450 r.p.m.

According to the Division, "an extremely ingenious method will enable Chrysler Airtemp to offer a line giving complete coverage for any temperature from 45° F. to -25° F." It was pointed out that "this can be accomplished with great interchangeability of parts and one standard bore on all models."

Although the new line will feature basically sealed units, an added advantage is that for areas where DC current is used, the mere substitution of a different end assembly provides for external direct drive, it was stated.

(Other products exhibited at the Show described on pages 11, 15, 17, 20, 21.)

Frozen Food Dispensers, New Delicatessen Case

Two models of the Quillen Home-Freez and the Quillen self-serve delicatessen case were exhibited at the All-Industry Show.

The home freezers are of 18 and 10-cu. ft. capacities and provide both freezing and storage space. A crosswise cold plate arrangement provides for easy segregation and finding of foods, the company claims. Grilles permit free circulation of air. The one piece lid is counterbalanced for easy opening, according to the firm.

The delicatessen case, of 6-cu. ft. capacity, is equipped with both direct and indirect lighting, double glass thermopane front panel, full length mirror, and a 1/3-hp. air-cooled motor.

William H. Durham of the company stated that Quillen is ready to start production on these units as soon as materials are available.

New Kerotest Valves Aim at Simplification

Three new products—an in-line two-way hand valve, a valve manifold, and a single port compressor valve—were featured by Kerotest Mfg. Co. at its booth along with numerous other items, including redesigned packed globe valves.

The two-way, in-line R-24 hand valve is of the diaphragm packless type and is said to be about 5/8 in. less in height than previous offset models. Mounting of this valve is facilitated by two lugs in the brass forging of the valve body.

Said to be more compact and of a better design which eliminates joints and the possibilities for leaks, the new Kerotest M-205 manifold combines in a single complete forging the manifold tube and valve bodies for two or three-valve manifolds. The advantage claimed by Kerotest for this design is that the installer does not have to screw the valve body into the manifold tube and then solder in place. Thus, there is no chance of leaks at this point, according to the company. It is available with sweat tube or flare tube connections in all sizes up to 3/4 in.

A feature of the new 767 single port compressor valve is the use of open slots in the mounting lugs to provide for variable bolt centers.

New Water Coolers and Plates by Day & Night

A new bubbler-type drinking water fountain, self-contained, was on display for the first time at the Day & Night Mfg. Co. booth.

This company's newest contribution to the refrigeration field, Flash Kold Sheets (plate type evaporators), and their medium size high suction pressure, tank coolers were also exhibited.

Sanitary Limits Freezer Production to One Model

Only its 12½-cu. ft. Quicfrez frozen food chest is now being manufactured by the Sanitary Refrigerator Co. of Fond du Lac, Wis., due to material shortages, a company official said at the All-Industry Show. This is one of four prewar models made by the company.

Norge Freezers, Water Coolers, And Compressors Shown

New home freezers, water coolers, and condensing units were on display at the Norge booth at the All-Industry Show.

Four models of home freezers were exhibited, one a vertical 6-cu. ft. model, and the others 10, 18, and 26-cu. ft. chest-type units. The vertical unit is identical to a normal household refrigerator in appearance and is claimed to take no more space in the kitchen than a refrigerator.

This model is intended primarily for the storage of frozen foods, though it can freeze small quantities, according to company representatives. The larger models are designed for processing large quantities of frozen food as well as storage.

The water coolers included a "Water Boy," a portable self-contained electric cooler, and the model NP 10. The "Water Boy" is said to be able to cool 1½ gals. of water per hour, enough for 15 persons. The NP 10 is said to be the only water cooler with a colored porcelain basin designed to blend in with other office furniture. This model is a vertical pressure type finished in autumn gold.

One condensing unit on exhibition was an open type with a 1/3-hp. motor. The other was a hermetic type powered by a 1/3-hp. Rollator unit. The hermetic job is said to be equipped with a double valve so that it can be detached and still maintain its hermetic qualities. There is no recirculation of air through the condenser in this unit, according to company officials.

Reverse Cycle System Is Tops In Drayer-Hanson Display

The center of attraction at the Drayer-Hanson booth was the Airtopia, a reverse cycle unit under actual operation, automatically changing from heating and humidifying to cooling and dehumidifying functions.

The newest product on display was their packaged high side, a self-contained combination of compressor, condenser, and controls. In addition, the 1947 model Drayer-Hanson water cooler, the electrically defrosted Hot Shot evaporator, the new model Spasaver, and Flocold forced air evaporators, and air conditioning coils were shown.

American Coils Introduces Low Temperature Unit

Latest models of Amcoil cooling units, food conditioners, and air conditioners were shown to the trade at the American Coils Co. exhibit.

Featured in the cooling unit line was the Zero Breeze low temperature unit which contains a built-in device to assure automatic defrosting of the cooling coil during each refrigeration off cycle. It can also be defrosted manually or semi-automatically, according to the company. The unit is designed for preservation of frozen food products at temperatures ranging from -20° to 20° F.

The firm also exhibited its utility down draft cooling unit, the Alservice reach-in panel cooling unit, the Alservice open-face cooling unit for installations where a forced draft is required, and its two-way ceiling-mounted unit which discharges cooled air in two directions.

Both the deluxe and utility food conditioners were on display. These units are designed for cooling and preventing dehydration. The deluxe model is said to maintain 85% humidity while cooling down to 36° F.

"DETROIT"

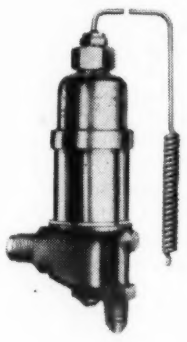
COMPLETE LINE OF EXPANSION VALVES

PREFERRED BY REFRIGERATION MEN EVERYWHERE

Preference of refrigeration men for "Detroit" Valves is based on a long record of excellent performance. The industry knows "Detroit" Valves will do a better job—keep right on doing it over years of service.

Illustrated and described here are representative members of the complete line. There is a "Detroit" Valve for every refrigeration need from extremely low temperatures to air conditioning temperatures.

NO. 673 THERMOSTATIC EXPANSION VALVE



For many years the standard of the industry. Gas charged—keeps evaporators completely refrigerated. Orifice sizes 3/64" to 7/32" with capacities up to 3½ tons Freon-12 or Sulphur, and 6 tons Methyl.

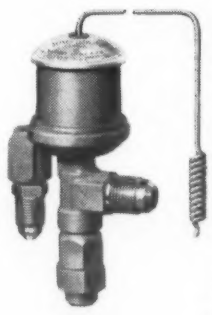
UNIT NUMBERS OF STANDARD NO. 673 VALVES

No.	Refrigerant and Operating Pressure	Orifice	Capacity
6731968	Freon-12—15 lb.	3/64"	1.0 tons
6731428	Freon-12—55 lb.	3/64"	1.0 tons
6731563	Methyl—10 lb.	3/64"	2.0 tons
6731411	Methyl—40 lb.	3/64"	2.0 tons

Inlets for above—3/8" S.A.E. for 3/8" x 1/4" Reducing Nut. Outlets—½" S.A.E.

Valves of other specifications are available.

NO. 573 THERMOSTATIC EXPANSION VALVE



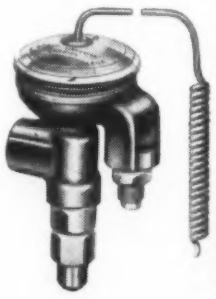
This valve, in ½-ton (Freon-12) capacity, has the quality and operating characteristics of the No. 673. Designed for small commercial installations, its double diaphragm construction makes possible close superheat control at low suction pressures. The two-diaphragm gas charged power element provides motor overload protection in its simplest, most effective form, using only one efficient power element.

UNIT NUMBERS OF STANDARD NO. 573 VALVES

No.	Refrigerant and Operating Pressure	Capacity
57300	Freon-12—45 lb.	.5 ton
57309	Freon-12—10 lb.	.5 ton
57311	Methyl—35 lb.	.9 ton
57315	Methyl—5 lb.	.9 ton

Inlet—3/8" S.A.E. for 3/8" x 1/4" Reducing Nut. Outlet—½" S.A.E. for ½" x 3/8" Reducing Nut.

NO. 893 THERMOSTATIC EXPANSION VALVE



Rated at ½ ton Freon-12 and Sulphur, .9 ton Methyl. Inlet 1/4" or 3/8" S.A.E. Outlet 1/4" female, MPT; 3/8" or ½" S.A.E. Regularly supplied with strainer at inlet.

UNIT NUMBERS OF STANDARD NO. 893 VALVES

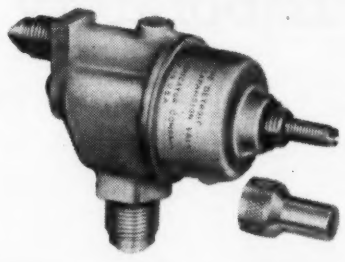
No.	Refrigerant and Operating Pressure	Orifice	Capacity
89335	Freon-12—15 lb.	1/16"	.5 tons
89330	Freon-12—55 lb.	1/16"	.5 tons
89333	Methyl—10 lb.	1/16"	1.0 tons
89329	Methyl—40 lb.	1/16"	1.0 tons

Inlets for above—4" S.A.E. Outlets—½" S.A.E.

Valves of other specifications are available.

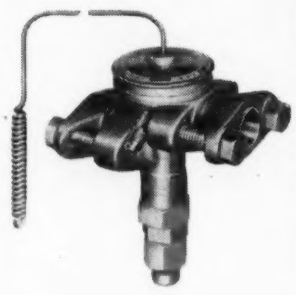
2444

NO. 672 AUTOMATIC EXPANSION VALVE



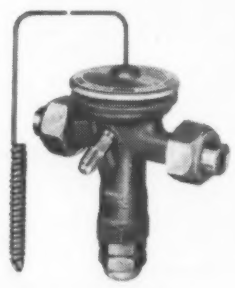
Pressure ranges 25" vacuum to 25 pounds pressure, or 0 to 50 pounds pressure. Orifices 1/32", 3/64", 3/32", and 7/32". Unit Number of Standard No. 672 Valve (3/64" orifice, range 25" vacuum to 25 lbs. pressure)—No. 672451. Other sizes available.

NO. 787 LARGE CAPACITY THERMOSTATIC VALVES



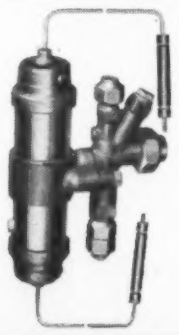
Special alloy diaphragms give reliable and uniform operation—Delubaloy needles and seats, exceptionally durable and corrosion resistant, high side liquid precooled by means of integral heat exchanger. Unit number of Standard No. 787 Valve (capacity 6-11 tons Freon-12)—No. 78711. Other sizes available. Supplied with external equalizer.

NO. 899 THERMOSTATIC EXPANSION VALVE



For commercial installations. Furnished with or without external equalizer and has forged union connections. Capacity 1.5 to 6 tons Freon-12 or Sulphur—3 to 11 tons Methyl.

NO. 793 DIFFERENTIAL TEMPERATURE EXPANSION VALVE—FOR OPERATION BELOW MINUS 30 DEG F



An entirely new design, it gives complete satisfaction on those difficult sub-zero jobs.

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General Offices: 5900 TRUMBULL AVENUE DETROIT 8, MICHIGAN

Division of AMERICAN RADIATOR & Standard Sanitary CORPORATION

Canadian Representatives—RAILWAY AND ENGINEERING SPECIALTIES LIMITED, MONTREAL, TORONTO, WINNIPEG

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"Detroit" Heating and Refrigeration Controls • Engine Safety Controls • Safety Float Valves and Oil Burner Accessories • "Detroit" Expansion Valves and Refrigeration Accessories • Stationary and Locomotive Lubricators

For DEPENDABLE Refrigerants

SPECIFY "EXTRA DRY ESOTOO" (Liquid Sulfur Dioxide)

"V-METH-L" (Methyl Chloride)

Distributors of

"FREON" REFRIGERANTS
11, 12, 21, 22, 113

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WEST NORFOLK, VIRGINIA
NEW YORK • BOSTON • DETROIT

We will have available about February, 1947, the following used ammonia equipment:—

2—Vilter 7½ x 7½, 2 cylinder, compressors with V-belt drive and 220 volt, 3 phase, 60 cycle motors.
3—Shell and tube condensers.
2—Receivers.
1—3" Pomona deep well turbine pump with 5 H.P. motor.
2—3" brine pumps with 15 H.P. motors.
1—3 H.P. brine agitator.

All equipment now in operation and available for inspection.

Power Engineering Corporation
Wilkes-Barre, Pennsylvania

NEWA Manual Will Outline, Analyze Functioning of Wholesalers, Distributors

NEW YORK CITY—Following the conclusion of the four day meeting held by its Executive and Management Committees late last month at Asheville, N. C., the National Electrical Wholesalers Association announces that preparation of a manual is now being planned which will analyze and describe in detail the functioning of various departments of electrical wholesalers and appliance distributors.

The handling of a customer's order from receipt to delivery and payment will be charted. This project, it is stated, will be one of the most comprehensive ever undertaken by the Association.

Summarizing the work of five major committees, president John L. Busey declared that N.E.W.A. soon will have made available to all members a program, based on committee reports and surveys of actual operations, that deals with every key phase of electrical wholesalers' activities. The fields covered are:

Accounting, warehouse layout, stock control, methods of compensating salesmen, methods of reimbursing salesmen for travel expenses and use of automobiles, the scientific selection of personnel, training of sales personnel, sales promotion to aid dealers, suggestions for more efficient management of retailers' operations in store arrangement, product display, inventory control, guides for electrical wholesalers and dealers relative to their financial management and financing of sales.

The following N.E.W.A. committees have undertaken the development of one or several portions of this overall program:

Operating Cost Committee—L. M. Nichols, chairman; Warehousing Committee, J. G. Johannesen, chairman (recently retired); Sales Promotion and Sales Training Committee—George F. Kindley, chairman; Store Management and Store Arrangement Committee—K. G. Gillespie, chairman; and Time Payment Financing Committee—H. S. Schiele, chairman.

At the meeting it was decided to review the work of all committees with a view to making some revisions and consolidations which would more directly relate the various committees to the product divisions within the industry.

Mr. Pyle reported that N.E.W.A. member companies now number 926, an increase over the 861 total at the time of the Association's last annual convention in April, 1946.

N.E.W.A., it was announced, will cooperate with the Bureau of Census, Department of Commerce, to help improve their monthly reports covering the operations of electrical wholesalers.

At the close of the meeting, and on behalf of the membership, an illuminated scroll of appreciation was approved to be sent to former managing director E. Donald Tolles.

The scroll acknowledged a debt of gratitude to Mr. Tolles for his "long years of outstanding accomplishment and wise leadership."

New Locker Plant Gives Prospects 10 Days To Claim Locker; Two Year Rental Required

LINCOLN, Neb.—Therien Frosted Food Locker Co., operated by R. A. Therien is opening its fourth locker plant in Lincoln, giving the firm more than 3,000 rental lockers in this city. The new plant will be at 9th and "L" Sts. in connection with a new Freadrich Bros. super market.

In opening the new plant, Therien's mailed a letter and blank check to persons on the firm's waiting list, requiring a deposit for a two-year period. Prices for this period are $26 for the drawer-type locker, $1 insurance, and 75 cents key deposit (refundable) or a total of $27.75. Two-year rental for the door-type locker is a total of $23.75.

Deposits were made either at the company office or the Continental National bank was being held in escrow until the opening day at which time rent begins. Lockers are assigned according to date of deposit, and if no deposit was received within 10 days, the company assumed that the potential customer did not desire a locker.

Therien's paved the way for their 1946 expansion early in the year by running advertisements in the local newspapers under the caption "Do You Want a Frozen Food Locker?" Demand for lockers during the war far exceeded supply and Mr. Therien wanted to find out whether this was just a war-time boom. Response to the advertisements convinced him that the rental locker business is here to stay.

The advertisements explained that their purpose was in the nature of a survey whose tabulations would determine the amount of expansion necessary to meet Lincoln's needs.

CPA Studies Action To Get Blower Motors

WASHINGTON, D. C.—Action to provide small motors for forced-air type household warm-air furnaces which have been installed without motors is being studied by the Civilian Production Administration. This action may take the form of certified orders from home owners or contractors to furnace suppliers through regular trade channels, the Warm Air Furnace Industry Advisory Committee was told at its recent meeting, CPA has announced.

Furnace manufacturers have found it necessary in some cases to ship warm air furnaces without blower motors, CPA said, because of the critical over-all shortage of these fractional horsepower motors. The motors will be needed to make the homes habitable during the coming heating season.

The committee said that the warm air furnace industry would cooperate with any steps taken by CPA to solve this problem.

Elimination of the cost limitation on supplies for emergency repair or replacement of heating facilities was recommended by the committee. The total cost of supplies for which priorities assistance may be approved at present to make emergency repairs to a dwelling made uninhabitable by the failure of plumbing or heating facilities cannot exceed $200, or $500 in the case of a building designed for occupancy by six or more families. This assistance is provided under Amendment 1 to Housing Expediter Priorities Regulation 5.

The committee recommended as an alternative, in the event the cost limitation is not removed, that the limitation on supplies for emergency heating repairs be set at $50 per room (for example, $250 for a five-room dwelling).

General Store Installs Iceberg Locker System

NEW HUDSON, Mich.—Pollock & Hopp, operators of a general store at 57891 Grand River, New Hudson, have installed the new Iceberg Refrigerated Locker System unit in their place of business.

The Iceberg unit installed by Pollack & Hopp contains sixty 6-cu. ft. locker drawers, with 30 on each side, arranged back to back. Since they are manufactured in sections, these units can be added to as additional needs require. They can also be easily moved from one location to another.

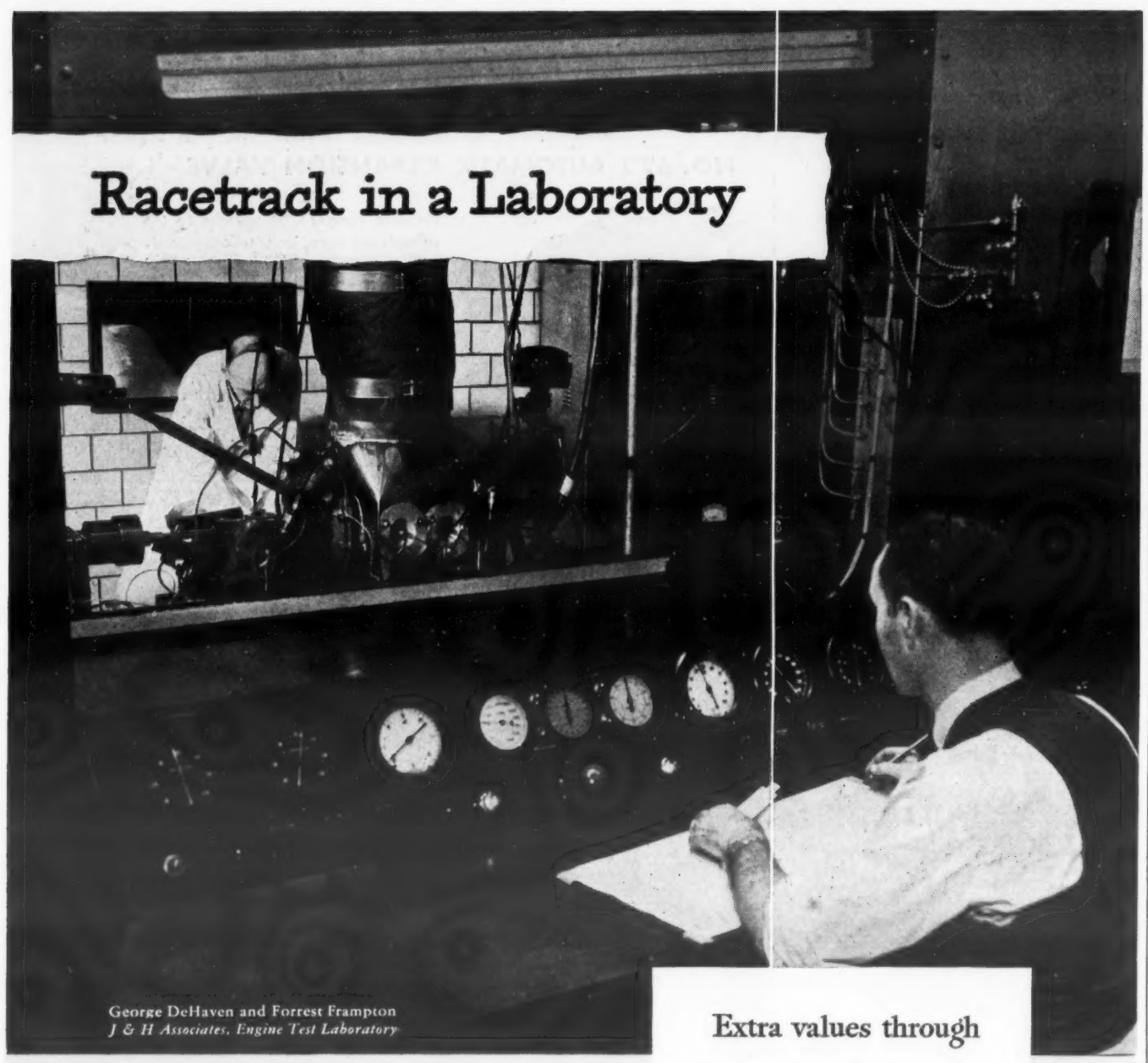
Mr. Pollack claims that Iceberg Locker Systems can be installed in 24 hours and the only physical requirements necessary are a level floor, electric service and water and drainage connections.

Pollack & Hopp is one of the first firms in this area to install an Iceberg Refrigerated Locker System.

Norwegian Village to Rebuild Fish Freezing Plant

WASHINGTON, D. C.—A large plant for the freezing and filleting of fish is among the first projects involved in the reconstruction of Honningsvaag, one of the hundreds of villages in Norway's northernmost province of Finnmark which was destroyed by the Nazis, according to a Department of Commerce report.

Racetrack in a Laboratory



George DeHaven and Forrest Frampton
J & H Associates, Engine Test Laboratory

Extra values through
JACK & HEINTZ
Mass Precision

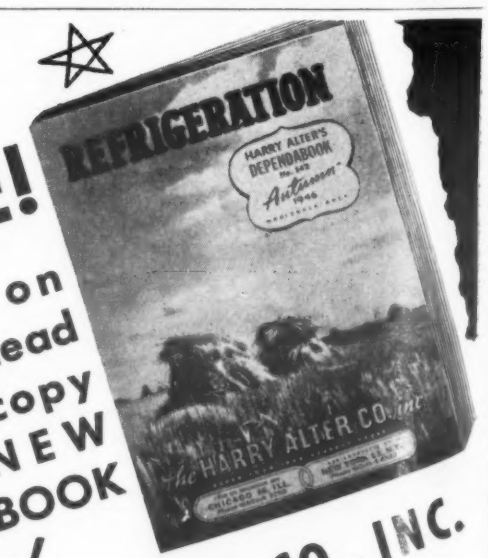
You are looking into one of the "torture chambers" of our engine laboratory where the world's largest pressure-die-cast, four-cycle engine is going through its paces. Under sustained tests this new Jack & Heintz slide-valve engine reveals exceptional fuel economy. Its weight is far less than that of conventional automobile engines. It is more efficient and has a much wider speed range.

This new engine is typical of Jack & Heintz achievements through *mass precision.* This rare combination of high precision and mass production is creating better engines, electric motors, refrigeration compressors, aircraft accessories, bearings and magnetos *today*, and is developing other revolutionary products for *tomorrow.*

JACK & HEINTZ PRECISION INDUSTRIES, INC., *Cleveland 1, Ohio*

IT'S A NEW ONE!

Just write on YOUR letterhead for YOUR copy of the NEW DEPENDABOOK today!



THE HARRY ALTER CO., INC.
1728 SO. MICHIGAN AVENUE
CHICAGO 16, ILL.
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NEW YORK 13, N.Y.

WE ARE NOW ABLE TO ACCEPT ADDITIONAL ORDERS FOR STAINLESS STEEL DRAINBOARDS

★ ALL SIZES AVAILABLE
★ TWO OR THREE TANKS
★ STAINLESS STEEL APRON IF DESIRED
★ WITH OR WITHOUT COCKTAILS

LA CROSSE COOLER COMPANY
Drainboard Dept. LA CROSSE, WIS.

INSIDE DOPE

by GEORGE F. TAUBENECK

(Concluded from Page 1, Column 1)

that it would reopen the contract.

The union demands, which have now been received at League headquarters, are by no means limited to "wage adjustments."

Union Demands

WAGES	$3.02 per hour
NIGHT SCALE	$3.32 per hour
OVERTIME	Double time for first four hours—triple time thereafter
HOLIDAYS	Ten paid holidays
VACATIONS	Four weeks paid vacation
SICK LEAVE PAY	Fifteen days per year
APPRENTICE PAY	40% of journeymen's scale, increasing annually
SEVERANCE PAY	One week's pay for each 6 months of employment up to 30 weeks

It's About Time

Jack Forbes of Superior Valve is one of the sponsors of the following letter to the well-meaning old gentlemen who unwittingly became the cause of most of our country's debilitating strife and tribulations. Because it's desperately important, that letter is quoted in full:

An Open Letter to
Senator Robert F. Wagner

In the interest of all who labor.

Dear Senator Wagner:

Your record of efforts for the betterment of humanity and your honorable service to the cause of your fellow-man, justifies this appeal.

We believe that the legislation that you introduced back in February of 1935 which became known as "The Wagner Act," has failed and deserves a revision. Who is there better qualified to do this than the man who sponsored and promoted it?

We suggest that you re-read the speeches you made on its behalf, the promises you announced, the hopes you expressed and compare them with the facts which events have recorded.

It is not our intention to embarrass you by quoting here your words; they stand as testimony to your interest in labor and your hopes to improve the status of the working man. But your plans have not worked. We believe that you must know that the law which bears your name has been the cause of more harm than good to the objectives you had in mind, a great deal more.

As proof of this statement note the following:

From 1924 to 1934, inclusive, there were work stoppages of 11,656. Workers involved therein amounted to 5,829,339.

From 1935 to 1945 inclusive, the work stoppages were 37,383, an increase of 25,727. Workers involved were 16,827,305, an increase of 10,997,966.

Instead of the peace you envisioned, there has been an era marked by the greatest labor strife in our history.

Instead of a new regime of improved relations between management and labor, for which you planned, events have proved just the opposite.

The human factor in all this (men idle, income lost, antagonisms developed), can never be recovered. Neither can the lost production, with its attendant delay of supplies for the war and the consequent fatalities of our soldiers.

As late as January, 1946, the records as presented by Leo Dolan in the *Journal-American,* stands as follows:

"There were 325 new work stoppages, which added to 175 strikes carried over from the previous month, made a total of 500 stoppages involving 1,750,000 workers and a total of 19,200,000 man days lost."

These "work stoppages" occurred in food production, railroads, coals, shipping, transportation, public services, on which the life of the nation depends, as well as in industry—automobiles, electric household equipment, building, etc.—an almost endless list.

Brave men never hesitate to acknowledge error. We believe that you have an opportunity to correct the evils unleashed by you.

We urge you to amend the law you fathered. Amend it in the light of the record of the past 11 years.

You are aware of the changes needed, but we suggest among others, that:

1. Management and labor must be held equal and responsible before the law, being responsible for contracts and responsible for infringements.

2. Eliminate the slave-labor phases which have developed through the "check-off" system and the closed shop, thus freeing the laborer to join the union of his selection and to engage in the job he elects—which rights are his under our Constitution.

3. Labor has now "grown up" and should assume the responsibility of its position and wealth. It should be responsible to its membership and the public it serves.

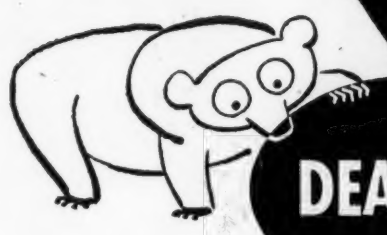
4. Eliminate the reckless union racketeer and dictators from labor organizations.

5. Respect the rights of minorities in unionism. Eliminate coercion and intimidations in union tactics.

We need such action now, Senator, so that this country may embark on a progress of production to meet the pent-up demands for goods. This will do more to remedy the present evils which confront us and which threaten our national existence than any other single factor.

C. M. PENFIELD,
Executive Secretary,
THE AMERICAN DEFENSE SOCIETY, INC.
(Founded by Theodore Roosevelt and Associates in 1915)

P.S. If you agree with the sentiments expressed in the above open letter to Senator Wagner, you can help by sending this letter to your representatives in Washington. (You have two Senators and one Congressman representing your interests.)



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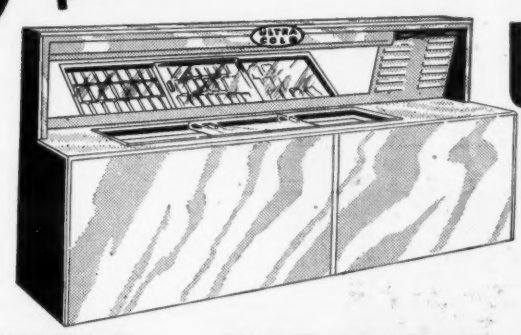
handle this proven, fast selling FREEZER!



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24 Models to Choose from
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THE MASTER SERVICE MANUALS - - -

— — — and other books of the Refrigeration Library are depended upon as textbooks in trade schools from coast to coast.

BUSINESS NEWS PUBLISHING CO., DETROIT

MAKING HEADLINES and PROFITS--
Coast to Coast!

A cooling unit that combines high humidity with temperatures down to 36°F.! No wonder the AMCOIL UTILITY Food Conditioner has awakened amazing interest in the trade since its introduction less than six months ago.

Hundreds of jobbers and dealers have found that this Unit more than meets the need for moderate-priced cooling equipment to do the *double job* of cooling and preventing dehydration. Only a Food Conditioner can do that—and AMCOIL has the *only* Food Conditioner!

Its unique construction, with built-in humidifier, enables it to cool down to 36°F. while maintaining high relative humidities up to 85% — producing the *one* condition that prevents dehydration and shrinkage of meat and perishable foods. When stored at proper low temperature and high humidity, meat retains its natural bloom and freshness—there is little waste from trimming. What a boon to butchers—what a chance for YOU to give it to 'em—at a good margin of profit too! Investigate today.

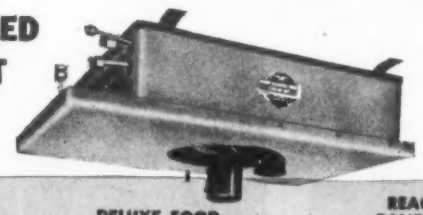
Also—the DELUXE Food Conditioner, slightly higher in price than the UTILITY model—with extra features, valves and controls. Send for Bulletin FC.

UTILITY FOOD CONDITIONER
KEEPS FOODS, MEATS FRESHER
Available for all sizes of cooling boxes and display cases. Streamlined. Maroon and black oven-baked enamel.

UTILITY DOWN-DRAFT UNIT
FOR BOTTLED AND PACKAGED GOODS
This wall-mounted unit available in every size—from smallest back-bar to the new 8 ft. high walk-in boxes. Cools only.

• Companion to the UTILITY Food Conditioner is the regular UTILITY Down-Draft Cooling Unit for storage of package commodities and bottled goods where dehydration is not a factor.

TWO-WAY CEILING-MOUNTED COOLING UNIT



Easy to Install • Easy to Make Connections • Easy to Service

For efficient cooling down to 36°F., this general utility, ceiling-mounted unit is made in sizes adapted for reach-in boxes and walk-in coolers. Air enters bottom of unit and is discharged horizontally in two directions along ceiling, insuring distribution of cooled air over entire cooler. Ideal for cooling packaged and bottled goods where dehydration is not a factor. Write for Bulletin UW.

OTHER FAST-MOVING AMCOIL PROFIT MAKERS

COMING SOON
DISPLAY CASE FOOD CONDITIONER

Model DWF

SEND FOR BULLETIN

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J. York Feitel, 813 Howard Ave., New Orleans, La.
Ernest Darwin Corporation, P. O. Box 2654, Charlotte 1, North Carolina
A. J. Nelson Co., 1635 Blake St., P.O. Box 2244, Denver, Colo. (CHerry 4131)
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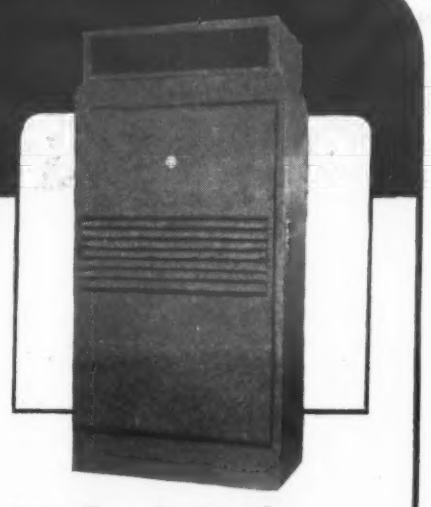
TYPHOON
A RESPECTED NAME IN AIR CONDITIONING



3, 5 and 7 TONS
SELF-CONTAINED UNITS

All-purpose, handsomely designed, smooth functioning air conditioning units with all copper condenser and liberally designed coils—removable outlet box for use with duct system—removable panel in back of outlet box for additional grilles where front and back air distribution is desired in center of room . . . two way adjustable deflecting grille . . . knock-out for fresh air connection . . . removable one-piece panel in front for easy accessibility. The cabinets are made of furniture steel . . . crackle finish. Also available with one or two row heating coil.

TYPHOON PRODUCTS

PROP-R-TEMP *Self-Contained Air Conditioning Units, 3 and 5 Tons.*
TYPHOON LOW-SIDES, *3 and 5 Ton Units.*
TYPHOON EVAPORATIVE CONDENSERS.
MONSOON *Heating, Direct Expansion and Water Coils.*

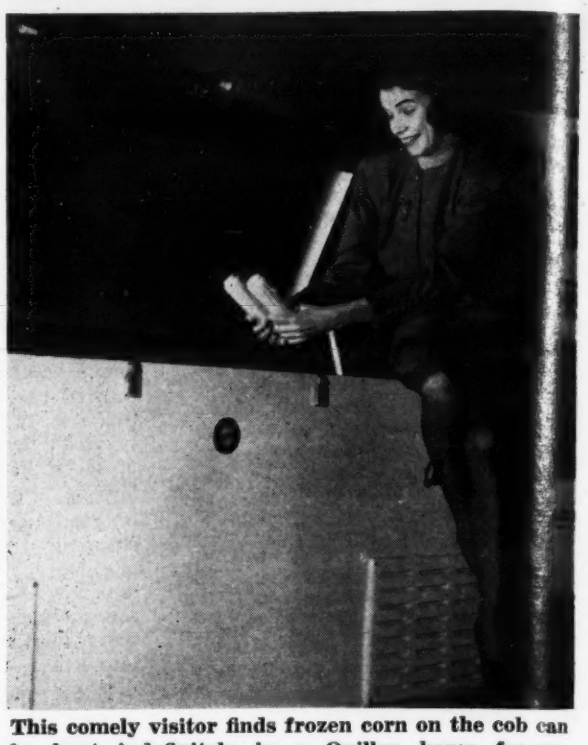
TYPHOON PRODUCTS

ICE AIR CONDITIONING CO., INC.
794-6 UNION STREET • BROOKLYN 15, N. Y.

Manufacturers Showed New Products and Demonstrated How They Work

"It's so tiny," says Mary Dublin, of Cleveland, as she views the new Jack & Heintz hermetically sealed refrigeration unit, exhibited at the All-Industry Exposition. Full design details on this unit are still being withheld, but the News will present them as soon as the company makes them available.

Joan Spiro and the new "Spir-o-Freez" frozen food dispenser which loads itself by means of gravity feed.



This comely visitor finds frozen corn on the cob can be kept indefinitely in a Quillen home freezer.

Thorpe Mayes demonstrates interchangeability of parts in Lehigh units to (l. to r.) John Plumere, Frank E. Shumann, and Frank Higgins.

Working demonstration of a solenoid pilot control in the Sporlan exhibit claims the attention of Mrs. Merle Haynes, wife of head of Pacific Factors, San Francisco.

Acme Industries showed a number of new products including a new-style evaporative condenser. Pictured (l. to r.) are J. C. Mance, K. A. Weatherwax, F. J. Oertel, J. F. Pearson, J. H. Seat, J. T. Maloney, and Pete Askew.

Mrs. Merle Haynes finds that York's Flakice machine produces ice in "frosty ribbons."

Officials of the associations who met in Cleveland for the show gather at the Auditorium for the official opening. Left to right: Ray Farquhar, Locker Suppliers & Mfrs.; C. G. Holme, Jr., Locker Operators; J. W. Witte, Locker Suppliers; H. F. Spoehrer, R.E.M.A.; Sen. Wherry, Nebraska (cutting the ribbon); Ted Glou, R.E.W.A.; Warren Farr, N.A.R.C.; Clarence Buschkopf, R.S.E.S.; K. B. Thorndike, Show chairman.

The "old oaken bucket" once supplied cool water; now water coolers do it, Cordley & Hayes showed.

In the General Engineering & Mfg. Co. booth, President J. H. Schreiber closes the deal with Jasper Nocito, New York, the first distributor to be signed up during the show.

Coolstream's water coolers including a "table model" (at left). In the picture are (l. to r.) M. Leventhal, Bernard Leventhal, Mrs. L. L. Berken, L. L. Berken, Mrs. Bernard Leventhal.

All kinds of equipment for frozen food handling were shown in Complete Refrigerator Supply Co.'s booth, including home freezers, open display cases, reach-in refrigerators, and home freezers.

Products Displayed Find Use In Numerous & Varied Fields

Electronic Controls and Locker Temperature Recorder

A pilot model of a new electronic oil burner control and an automatic locker temperature recorder attracted visitors to the Minneapolis-Honeywell booth.

According to Vice President John E. Haines, the oil burner control provides an immediate safety shutdown and works down to ⅛° F. Using the same thermostat as on railroad cars and airplanes, the Minneapolis-Honeywell control employs an electric eye for oil heat and a flame rod for gas heat.

Mr. Haines explained that the control measures the capacity of heat instead of the resistance. The flame rod just needs to get close to the flame to operate, he said.

The locker thermometer register records the temperature inside a locker on a disc which is changed once a week. It can work either automatically or manually, according to Mr. Haines.

Plates With 'Web Like' Refrigerant Circulation

Complete surface freezing is claimed for the Hubbell Yoder cold plates displayed at the All-Industry Show. These plates, according to the manufacturer, allow the refrigerant to circulate in a broad web thus making the entire plate area prime heat pick-up surface. The plates are designed for all low-temperature applications.

Frozen Food Equipment and Reach-Ins Shown by Pinocchio

Bookings for immediate delivery were taken on all products of the Complete Refrigerator Supply Co., manufacturer of the Pinocchio line.

At its booth, the company displayed its lock and hinge accessories, the Pinocchio 15 cu. ft. home freezer, its glass top display case, its 16, 24, and 30 cu. ft. reach-in refrigerators, its open-type freezer, its Revco chill chest, and its food savings bank.

Halide Leak Detector

Featuring the Halide leak detector, the Union Carbide & Carbon Chemical Corp. of New York City displayed its wholesaler line of welding and leak detecting equipment for the refrigeration service man at the All-Industry Show.

Five Models Shown in Water Cooler Line

Five models of Cordley water coolers were displayed at the Cordley & Hayes booth at the All-Industry Show. They included two types of one bubbler units for offices, factories, and schools, a two bubbler type, a restaurant type, and a bottled water type.

All are open compressor units except one single bubbler cooler which is equipped with a hermetically sealed unit.

All the coolers are equipped with air cooled condensers. The single bubbler cooler with the open type compressor, however, can be equipped with a water cooled condenser for installations where excessive dust or lint conditions prevail, according to the company.

Many New Flow-Control Devices in Alco Exhibit

Featured new products by the Alco Valve Co. were a type 732 temperature actuated snap-action suction valve, the Thermo-Limit thermostatic expansion valve, a temperature override valve for air conditioning applications, and a remote electronic liquid level control.

The snap-action valve is said to be actuated on a 3° F. temperature differential and has a range of 20° to 50° F. It can be used for either a multiple or single hook-up and is only about one fifth the normal size for such valves, according to Arley Baker, assistant sales manager.

The Thermo-Limit valve acts to limit suction pressure automatically when starting, reducing strain and wear on condensing equipment, and preventing burned out motors due to initial overload.

Pressure limiting is provided by interchangeable "cartridges," each charged to a predetermined pressure. The valve is designed for capacities of ¼ to 1½ tons "Freon-12," or ½ to 3 tons methyl chloride.

These products should be available to the trade by the first of the year, according to Mr. Baker.

Unit Coolers For All Uses in Fedders-Quigan Line

Latest type unit coolers and air-cooled hydrogen brazed condensers were displayed at the Fedders-Quigan booth at the All-Industry Show.

The unit coolers, sold under the company name, are designed both for use in walk-in coolers or large rooms, and for reach-in and display cases. The condensers are made to manufacturers' specifications.

Complete Controls Line Shown by General

General Controls Co. revealed a complete line of solenoid valves of all sizes, consisting of single seated valves, pilot piston valves, and motorized hydramotor valves for all refrigerants including ammonia. These solenoid valves are built forged bodies.

Also exhibited was a complete line of strainers of all sizes with removable screens. A line of thermostats and relays for various types of installations were on view.

Thermostatic expansion valves with capacities ranging from ⅓ to 5 tons, with quick changeable orifice cartridges were demonstrated on a refrigeration system using a glass evaporator.

Copeland's Complete Range of Products

Show visitors were given an "inside look" at a working model of the Copeland compressor. On display were belt-driven condensing units, air cooled, remote type from ¼ to 2 hp.; air-cooled remote type from ½ to 7½ hp.; water-cooled remote type ⅛ to ½ hp., and air-cooled, self-contained type.

Also featured were models of the "Copelametic" condensing units from 1/20 to ¾ hp. The Copeland household refrigerator and the electric pressure-type water cooler were also shown.

New 'Detroit' 573 Valve Exhibited

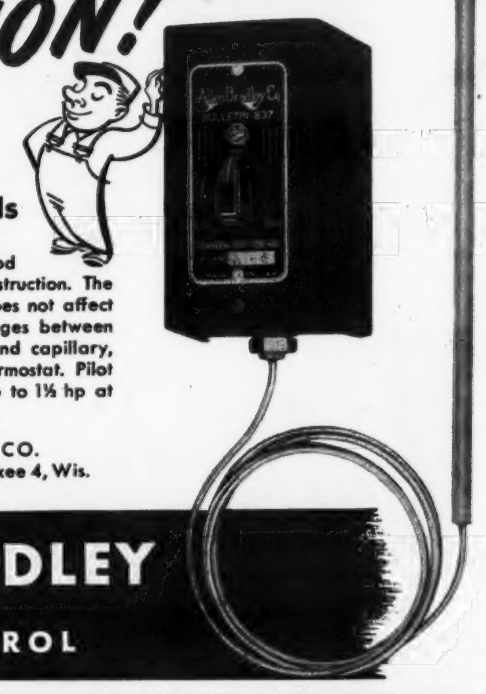
The new Detroit thermostatic expansion valve, No. 573, was on display for the first time. This valve has a ½ ton capacity. Featured in the complete display of the Detroit line was the No. 673 thermostatic expansion valve. An operating exhibit demonstrated how the Detroit features reduces the wattage load on a compressor motor during the initial pull down cycle.

Floor-Type Unit Cooler Featured by Bush

Occupying a featured position in the Bush display was the floor type unit cooler which may be used for either low or high temperature applications. The ceiling mounted Bush unit, manufactured before the war, was re-introduced at the exposition in new designs.

Other models of unit coolers adaptable for either ceiling or wall mountings were shown. In addition were shown the Bush plasticoolers, air conditioning coils, and ice making evaporators.

LIFETIME PRECISION!



Bulletin 837
Temperature Controls

Give accurate control for a long period because of their simple, rugged construction. The temperature of the surrounding air does not affect the setting. Available in different ranges between -50 F and 500 F with remote bulb and capillary, with immersion bulb, or in a room thermostat. Pilot duty rating is standard but ratings up to 1½ hp at 220 volts are also available.

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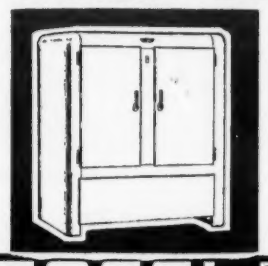
QUALITY
MOTOR CONTROL

YOUR BEST BET....FOGEL



RECOGNIZED AND RESPECTED FOR ALMOST HALF A CENTURY. NOW BETTER THEN EVER

INTERESTING DISTRIBUTOR PROPOSITION. WRITE NOW!

A FEW TERRITORIES STILL AVAILABLE

FOGEL REFRIGERATOR COMPANY • Since 1899
5400 Eadom St., Philadelphia 37, Pa.

See the new Coolstream ELECTRIC WATER COOLERS ON DISPLAY at your distributors!

Long-Lewis Hardware Co.
Fifth Ave. at 9th St. North
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Joseph Simons Co.
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Hartford 5, Connecticut

Thermotic Engineering Co.
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Washington 9, D. C.

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Miami 36, Florida

W. B. Haggerty, Inc.
P. O. Box 2971
Tampa 1, Florida

Refrigeration Exchange, Inc.
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Fidelity Engineering & Distributing Co.
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Modern Refrigeration Sales & Service
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General Pipe & Brass Co.
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St. Louis 8, Missouri

Central Plumbers Supply Co., Inc.
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Port Chester, New York

First Colony Distributors, Inc.
107 East Martin Street
Raleigh, North Carolina

Refrigeration Sales Corp.
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Cleveland, Ohio

A. L. Sherman & Sons
Manhattan Bldg.
4th & Walnut Streets
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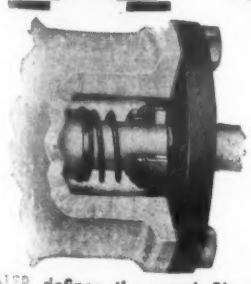
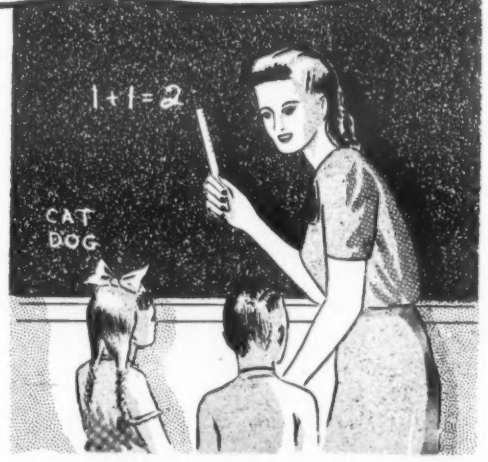
EVOLUTIONARY IN ENGINEERING
REVOLUTIONARY IN DESIGN

THE Coolstream CORPORATION
240 Butler Street, Brooklyn 17, N. Y.

THE ROTARY COP SAYS:

The Construction of ROTARY SEALS is as simple as 1+1=2





WEBSTER defines the word Simplicity as follows: "Quality or state of being free from complexity, intricacy or elaboration; CONSISTING OF FEW PARTS."

The above is a perfect definition of ROTARY SEALS which have won world wide recognition for domestic and commercial service. ROTARY SEALS are constructed on the principle uppermost in the minds of research engineers—"THE FEWER WORKING PARTS, THE LESS DANGER OF TROUBLE."

ROTARY SEALS are available for over 752 models of refrigerator assemblies

ROTARY SEAL COMPANY
2020 N. LARRABEE ST., CHICAGO 14, ILL.
Canadian Office: 382 Victoria Avenue, Montreal 6, Quebec, Canada

They'll Do It Every Time . . . . By Jimmy Hatlo

HOW'S MY NEPHEW TAKING HOLD, SIMPKINS? DOING O.K.?
WELL-ER-FINE. IT TAKES A LITTLE TIME TO GET THE HANG OF THINGS.
HE'S TAKING HOLD OF THE PONIES, ALL RIGHT. AND THE BOOKIES WILL BE TAKIN' HOLD OF HIM.
WE'D BE BETTER OFF IF HE WENT TO THE TRACK AND THE HORSES CAME IN TO WORK.
HE CAN TELL YOU WHAT ANY HORSE EVER DID, BUT HE DON'T KNOW FROM NOTHIN' ABOUT THIS RACKET
I WISH I WAS SOMEBODY'S RELATIVE.
OATBIN TIPS
JIMMY "ATO"
5-10
WATCHING THE WHITE-HAIRED BOY GET AWAY WITH MURDER — THANX TO ELVA OBLINGER, MONROE, N.Y.
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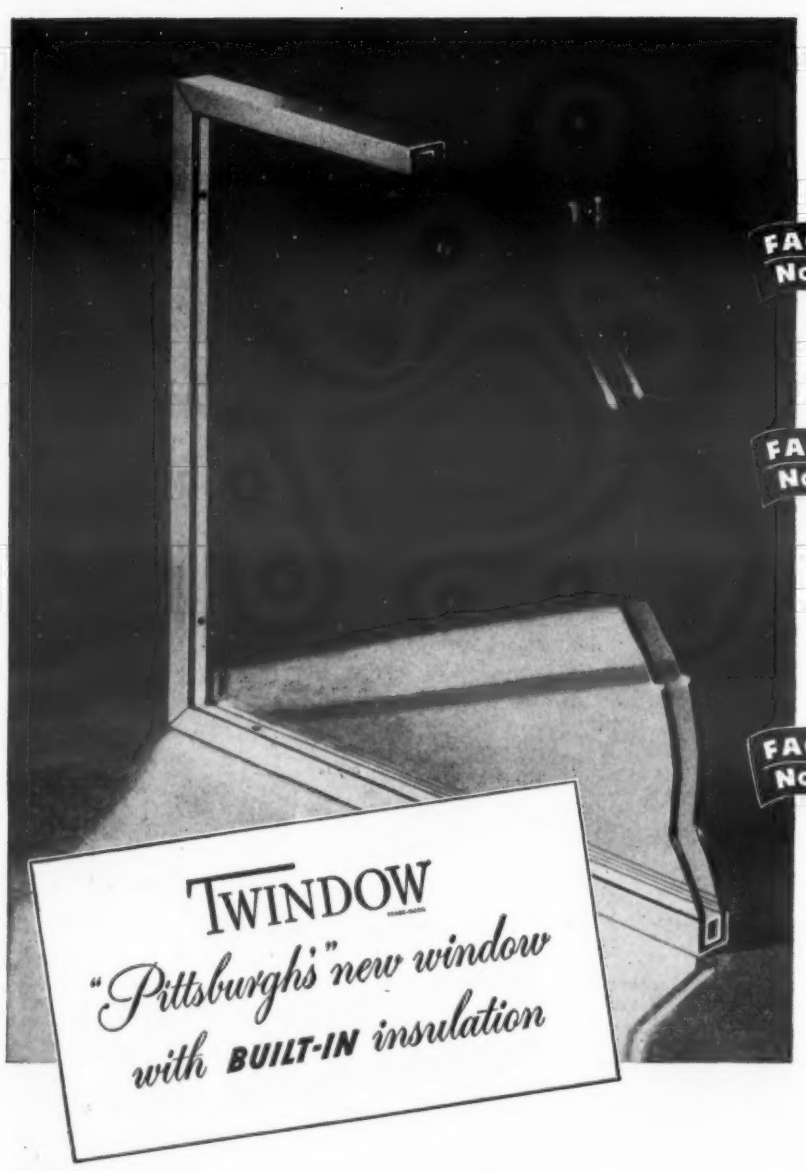
Out With Special Privileges--Revise the Wagner Act!

It will pay to read these FACTS about TWINDOW

TRADE-MARK



FACT No. 1

Twindow is the newest development in insulating windows

It consists of two or more panes of glass with a hermetically sealed air space between, and a protecting frame of stainless steel. Twindow is the result of "Pittsburgh" research to create an economical window unit combining transparency with built-in insulation.

FACT No. 2

Twindow saves money on heating and air-conditioning

Twindow with two panes of glass has more than twice the insulating efficiency of ordinary windows. With three or more panes, the insulating efficiency is still further increased. This saves money by reducing the load on heating and air-conditioning equipment. It not only saves fuel . . . it makes practical more and larger windows so that rooms can be flooded with natural daylight. More use of daylight will cut lighting bills.

FACT No. 3

Twindow makes any building more comfortable and more healthful

It helps to maintain proper temperature and humidity levels. It virtually does away with downdrafts near windows.

FACT No. 4

Twindow is designed to prevent fogging or condensation on the glass

Except under extreme conditions, its sealed-in air space assures window transparency in any climate. This makes Twindow a "must" wherever clear vision is important . . . picture windows for homes, store front display windows, large windows in office buildings, factories, and institutions.

FACT No. 5

Twindow can be handled, installed and cleaned as simply as a single pane of glass

It is a one-piece window unit, completely prefabricated.

We regret that current production is not meeting demands. Deliveries must continue slow until new facilities are completed. When planning new construction or modernization, we suggest you get in touch with our nearest branch to determine if our delivery schedule will permit your use of this finest of insulated windows.

Pittsburgh Plate Glass Company
2391-6 Grant Building, Pittsburgh 19, Pa.

Please send me, without obligation, complete facts about TWINDOW, the window with built-in insulation.

Name_____

Address_____

City_____ State_____

"PITTSBURGH" stands for Quality Glass and Paint

PITTSBURGH PLATE GLASS COMPANY

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Trade Mark registered U. S. Patent Office; Est. 1926

AIR CONDITIONING AND REFRIGERATION News

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F. M. COCKRELL, *Founder*

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Unfinished Business For the Decontrollers

INASMUCH as a business paper editorial writer's job is that of interpreting conditions affecting an industry, pointing out trends and suggesting courses of action, he concerns himself with economic and political factors as well as with intra-industry matters. Particularly is this true in this day and age, when business has become so tangled up with government.

Among the current obstacles obstructing the progress of the refrigeration and air conditioning industry, certain restrictive orders which have been issued by the Civilian Production Administration loom large. With regard to these orders, the Air Conditioning & Refrigerating Machinery Association has adopted a carefully-worded, finely reasoned Resolution. Because it makes a good editorial in itself, this resolution is reproduced here:

ACRMA Resolution Presents Undeniable Logic

"WHEREAS, in the opinion of the members of the Air Conditioning & Refrigerating Machinery Association, Inc., continued maximum production of civilian goods and services can be accomplished only by American business free to operate in an unrestricted economy; and

WHEREAS maximum profitable employment is the direct result of maximum efficient production; and

WHEREAS it is the desire of members of the Air Conditioning & Refrigerating Machinery Association to provide these goods and services, including housing and other requisites of our returning servicemen and women, the most important of which is profitable and gainful work; and

WHEREAS a priority system controlling all production materials during wartime eventually was made to function only because of wartime conditions; and

WHEREAS a partial priority system covering only a few items can only upset and interfere with total over-all production, to the end that total production is restrictive and curtailed; and

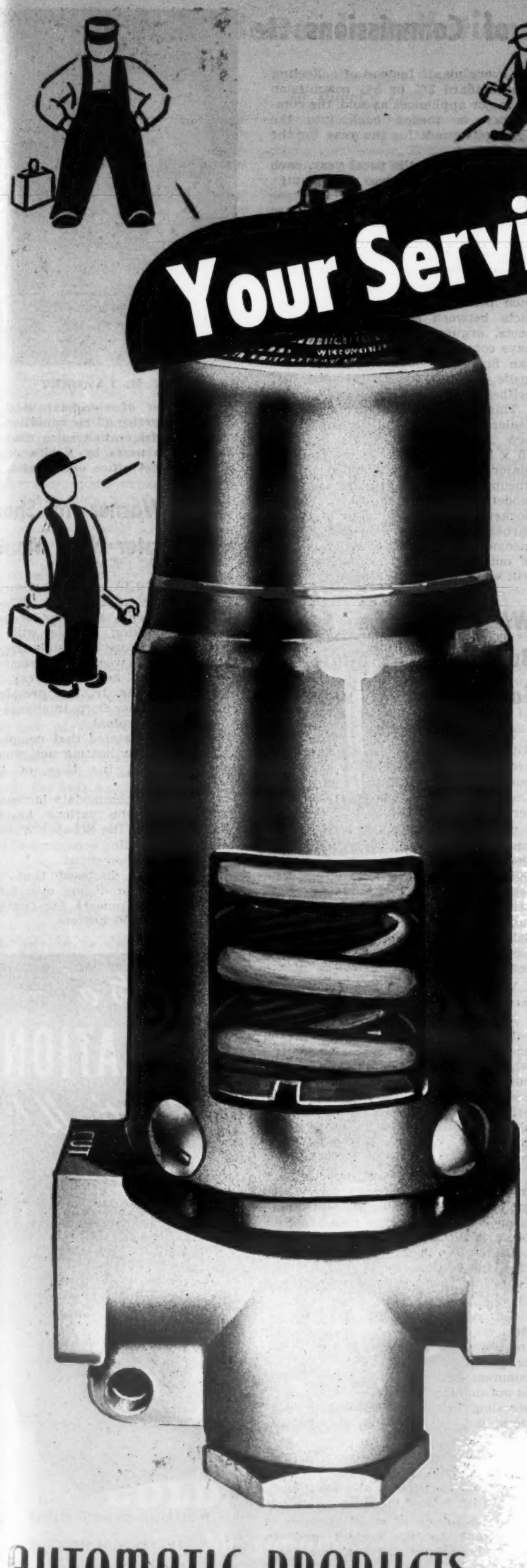
WHEREAS such conditions will cause unemployment due to interrupted and intermittent production; and

WHEREAS Civilian Production Administration Directions #12, #13, and #14 to Limitation Order M-21 and Direction #18 to Priority Regulation #28 are not only definitely restrictive to business generally but are not now resulting in any real advantage in the area of veterans' employment and training, to which they were primarily directed;

BE IT THEREFORE RESOLVED by this Air Conditioning & Refrigerating Machinery Association, Inc., that the Civilian Production Administration be urged to revoke and withdraw these Directions and all other restrictive orders and regulations, in order that industry may solve its production problems and total production may reach the highest possible level, to the benefit of the total national economy; and

FURTHER, BE IT RESOLVED, that the importance of such action in the interest of the public at large be called to the attention of the members of the Congress of the United States and the individual officers of our Government by sending to each of them a copy of this resolution."

Those subscribers to the NEWS who have acquired the useful and patriotic habit of writing to their Congressmen about governmental matters which affect their business are urged to follow through on this resolution.



Your Service Work is EASIER...

because A-P REFRIGERATION VALVES ARE *Dependable*

SELF-CLEANING WATER REGULATING VALVE AVOIDS TROUBLE DUE TO DIRT AND LIME

Its many unique design and operating features place the new A-P Model 68-B Water Regulating Valve in a class by itself — for accurately controlling water flow in water-cooled condensing units.

INSURES YEARS OF DEPENDABLE SERVICE

Differing radically from conventional valve design, the Model 68-B employs a molded composition seal on the valve stem. This seal moves *across* the polished mirror-smooth stainless steel seat, to provide *self-cleaning* "wiping" action, thus avoiding common troubles due to dirt and lime in the water.

The Model 68-B has been laboratory tested in *sandy water* — the equivalent of many years of actual field use — and neither the sliding seal nor the seat show any sign of wear — indicating "lifetime" efficiency.

Put the Model 68-B on either new or present installations to improve operation and insure years of Dependable service. Ask your jobber about it, or write for Bulletin No. M100.

FEATURES OF A-P MODEL 68-B PRESSURE ACTUATED WATER REGULATING VALVE

Long Stroke gives closer, more uniform control.
Self-Cleaning action avoids troubles due to dirt or lime in water.
Wartime-proved packless "O" Ring valve stem seal
Chattering, water-hammer positively eliminated.
Drain plug permits valve flushing.
Flow not affected by compressor pulsations.
Head pressure range 50 p.s.i. to 150 p.s.i.
Adjusting nut easily accessible.
Used on Freon, Methyl Chloride, or Sulphur Dioxide systems.
Three sizes — ⅜", ½", ¾" inlet and outlet.

AUTOMATIC PRODUCTS COMPANY
2450 NORTH THIRTY-SECOND STREET • MILWAUKEE 10, WISCONSIN
EXPORT DEPT. 12 E. 40th STREET, NEW YORK 16, N. Y.

DEPENDABLE *Refrigerant Valves*

Stocked and Sold by Good Refrigeration Jobbers Everywhere . . . Recommended and Installed by Leading Refrigeration Service Engineers

B. F. Goodrich to Spend Huge Sum Air Conditioning Labs

BRECKSVILLE, Ohio — Wartime windowless, air conditioned, "blackout" plants proved so efficient and comfortable that the B. F. Goodrich Co. has ordered a third of a million dollars worth of air conditioning for its new research laboratory buildings here from Carrier Corp., it has been announced.

In announcing receipt of this significant order, Carrier stated that the air conditioning for this laboratory had been worked out with the designers of the building to provide precise control of the temperature and humidity of air in the laboratory in order to improve the precision with which tests may be conducted.

Exclusive - BTC EVAPORATOR PLATES
for Effective and Economical Refrigeration

The exclusive "Cross-Flow" design can be obtained only in the BTC Evaporator Plates. The special gridiron construction achieves results not possible with other prime surface plates. "Cross-Flow" BTC Evaporator Plates feature More Prime Surface: The gridiron design gives a uniform "wetted" surface — utilizing the full-flooded principle, the entire plate is prime surface with every square inch doing an effective refrigerating job.

Greater Heat Transfer: "Cross-Flow" system produces a greater turbulence of the refrigerant, thereby increasing the heat transfer coefficient.

Lower Pressure Drop: Multiple paths for refrigerant flow makes possible low pressure drop with resultant economical operation. No large vapor bubbles persist to reduce efficiency or cause operating troubles.

BTC Evaporator Plates are constructed of heavy 16-gauge steel, gridiron embossed, electrically welded, with metallized finish, thoroughly dehydrated—moisture-vapor free and scrupulously clean. The basic design plate can also be fabricated into "L," Step, "U" and Cylindrical forms to meet all commercial and technical applications.

Write for this illustrated bulletin.

THE BREWER-TITCHENER CORPORATION
CRANDAL-STONE DIVISION --- BINGHAMTON, N. Y.

Dealer Avoids Sales Personnel Conflict By Maintaining 'Pool' of Commissions

LONG BRANCH, N. J.—Mindful of the fact that one of the worst prewar problems of appliance retailing was the constant turnover of specialty salesmen, owner Arthur Harmon of Coast Hardware Co. here, has developed a practical compensation plan which he feels will keep every man contented with his job.

Coast Hardware Co. has devoted the entire front of the store to four lines of refrigerators, three of ranges, and eight brands of washing machines, plus many supporting items such as radios and home freezers. Instead of leaving it up to hardware salespeople to handle the sales job, Mr. Harmon hired Irving Shapiro, recently graduated from New York University, as manager, and two other college men as salesmen.

These three will sell only appliances, supported by specially trained store salespeople who will contact prospects, escort them into the appliance department, and hold them there until a specialty man is free to take over. To protect the specialty men, no employes of the hardware division will make actual sales, and each specialty man will have his "up" turn in rotation.

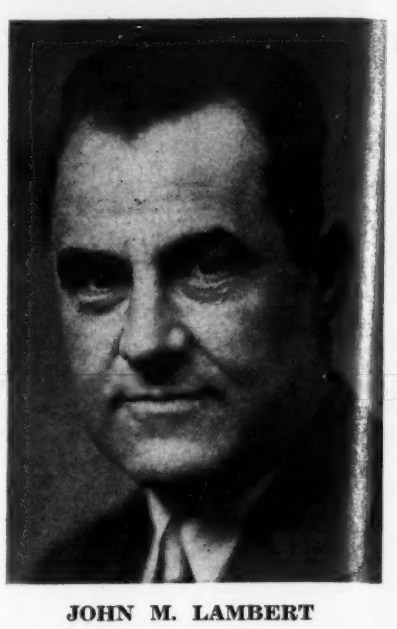
Going farther, Mr. Harmon has arranged for a definite income goal for every man. Instead of collecting the standard 3% or 5% commission on major appliances as sold, the commission is turned back into the aggregate profit for the year for the department.

At the end of the fiscal year, each of the men then receives a percentage of the total. Meanwhile, the three men will receive salaries which are more than adequate.

"By putting the whole thing on this basis, we get a lot of teamwork between the three men striving to build up the profit percentage," Mr. Harmon pointed out. "Instead of conflicts between salesmen over prospects, arguments as to who should have commissions, etc., any salesman can finish a sale on which another made the first contact, assured that neither has wasted his time."

This largest of mid-New Jersey dealerships has recently completed a new 10,000 sq. ft. store, devoting 45 x 50 ft. of space in the front to major appliances. Included in the lineup of attractive displays are three model kitchens, designed to fit the pocketbooks of customers in wage-earner, small business, and better-income brackets. Eventually, a crew of outside salesmen is planned, who will work on a similar plan.

York Appointee



JOHN M. LAMBERT

As manager of consumer sales, he will supervise all air conditioning and refrigeration sales made direct with users by York's national district office organization.

Ruthenburg Sees Servel's Business Booming in 1947

FRENCH LICK, Ind. — Despite threats of economic "bad weather," Louis Ruthenburg, president of Servel, Inc. forsees a record breaking business for his company in 1947.

Before 300 Servel sales representatives gathered at the company's national sales convention here, Mr. Ruthenburg envisioned a peak employment of 7,500 in 1947, as compared with 4,200 before the war. The firm now reportedly employs 6,000.

Refrigerator production, he said, is 80% of prewar normal output, while air conditioning production is expected to get under way in 1947.

WAA Issues New Small Business Interpretation To Aid Priority Sales

WASHINGTON, D. C.—War Assets Administration has issued an interpretation of its definition of small business, designated to be of assistance to its regional directors in matters of priority sales.

The agency's standard definition of small business as given in various of the WAA regulations is not changed, but the interpretation spells out certain criteria to be used when factors other than the number of employes are required in order to arrive at a determination as to whether a commercial, industrial, or agricultural enterprise is a small business.

WAA's standard definition of small business is:

"Any commercial or industrial enterprise or group of enterprises under common ownership or control which does not have at the date of purchase of surplus property more than 500 employes, or any such enterprise which by reason of its relative size and position in its industry is certified by WAA to be a small business."

Because its field officials desired more specific criteria for their guidance in arriving at determinations of small business when factors other than number of employes were to be used as the basis for determination, the new interpretation sets the following standards for "size" and "position":

(a) A small business may be defined as an independent commercial, industrial, or agricultural enterprise, or group of such enterprises, under common ownership or control, which is not dominant because of its size or standing in its specific field of business; and

(b) Is not financially or otherwise in any way controlled by a commercial, industrial, or agricultural enterprise which occupies a dominant position in its field of business activity.

The definition of small business is important to wholesalers and to small businesses purchasing surplus property.

Wholesalers buying without priority are permitted to purchase surplus goods at lowest prices if they sign an agreement to resell it only to small business as defined by WAA.

Only two classes of small business buy war surplus goods with priorities:

1. The veteran who is establishing himself in a small business (this group has No. 2 priority).

2. Small business buying through the Reconstruction Finance Corp. (this group has No. 3 priority).

The Surplus Property Act does not define small business. It is WAA's responsibility to make the definition pertaining to the first group, and RFC's responsibility for the second group of buyers. By joint agreement, the two agencies have adopted similar definitions.

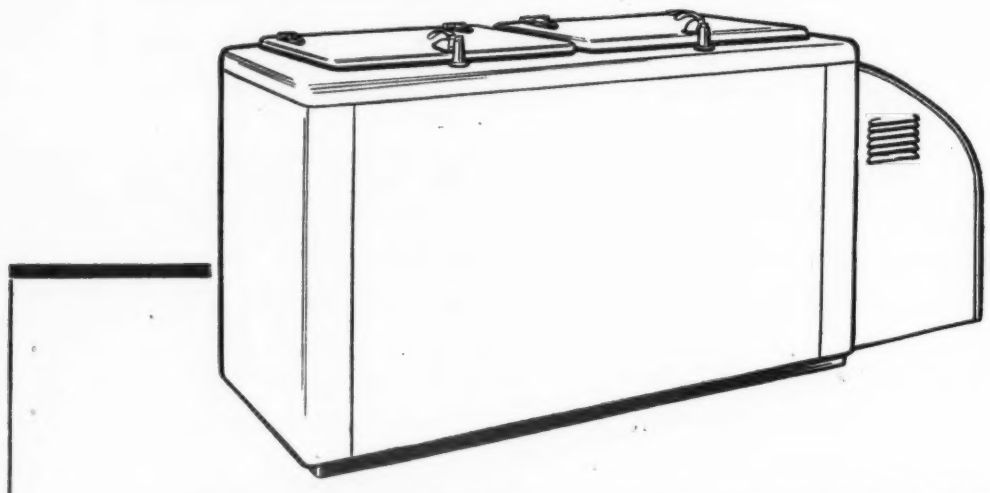
Stewart-Warner to Show Home Heater Next Month

INDIANAPOLIS — Manufacture of the Stewart-Warner "South Wind" house-heating unit is now under way and first working models will be shown in New York and Indianapolis during the last week in November, it was reported here last week by Lynn A. Williams, Jr., vice president of Stewart-Warner Corp. in charge of the Indianapolis plant.

Mr. Williams stated that complete details of the new heating unit would be disclosed at the time of the unveiling.

In order to accommodate increased production of the various heaters manufactured in the Stewart-Warner plant here, a building occupying 88,000 sq. ft. is being converted.

Mr. Williams disclosed that the heater plant is producing over 3,200 units daily. Shipments for October will exceed 65,000 heaters.



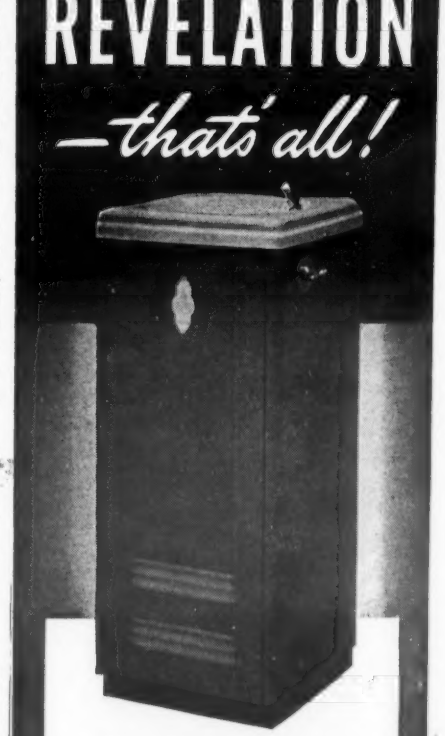
FREEZER CABINETS
WORTHY OF YOUR BEST EQUIPMENT
SANITARY 12.5 CUBIC FOOT MODELS
AVAILABLE COMPLETE, LESS CONDENSING UNIT

Attractively modern in style, heavily built with steel welded frame, rich in many unusual and exclusive quality construction features, SANITARY Freezer Cabinets are now in limited production for shipment on a 30 to 60-day basis. Each cabinet is complete with freezer plates, cold control and "Freon-12" expansion valve requiring merely installation of your own condensing unit. Typical of SANITARY design and engineering, every detail in these Freezer Cabinets is aimed at long service life, high efficiency in food freezing and storage—at lowest operating costs.

PLACE YOUR ORDER
for these "top quality" SANITARY Freezer Cabinets TODAY.

SANITARY REFRIGERATOR COMPANY
MANUFACTURER
FOND DU LAC, WISCONSIN
Ice Refrigerators For More Than 40 Years
Quicfrez Farm Locker Plants Since 1939

It's a REVELATION —that's all!



★ Exclusive Dealer Franchise
★ Now in quantity production
★ All sizes: Industrial and Commercial
★ The last word in...

ELECTRIC WATER COOLERS

Revelation Company
Division of
Interstate Engineering Corporation
2600 Imperial Highway
El Segundo, California

New Items Will Help Dealers Make More & Better Installations

Aluminum 'Flash Plates' Introduced by Peerless

The new Peerless aluminum "Flash Plates" for all low temperature applications and the Peerless Model AA capacity boosters were highlighted at the company's booth.

Constructed of flat aluminum plates mechanically bonded together by the copper or aluminum tubing which provides the refrigerant circuit, the "flash plates" are said to earn their name through the non-ferrous high conductivity and uniform distribution of refrigerant throughout the plate.

Weighing approximately 2½ lbs. per sq. ft., the plates are claimed by Sales Manager Mel Knight to provide substantial savings in shipping costs and handling costs.

Continuous tubing is said to assure low maintenance cost.

Mr. Knight declared that Peerless is now in production on these plates and should start deliveries by December.

The new model capacity boosters are built to allow parallel connections throughout. Inlet and outlet liquid connections, as well as the suction connections, are said to be brazed by a new process of manufacturing which eliminates any possible leak.

Constructed of seamless copper tubing, the Peerless boosters have Thermek heat transfer surfaces which are never separated from the parent copper of the tubing. An interior baffle insures maximum refrigerant contact.

The boosters are equipped with either SAE or sweat fittings.

A new package for the Model AA boosters, done in a Chinese red barber pole design, was also introduced. This design formed the background of the entire Peerless booth.

Insulation for Units Operating at -150° F.

Working models featuring the application of Santocel featured the Monsanto exhibit. Center of interest was an industrial metal-chilling cabinet insulated with Santocel. Temperatures as low as -150° can be maintained in this unit, it was claimed.

Also shown was a shipping container for use in rail or truck shipments of frozen food through use of dry ice. Applications of Santocel in truck and trailer bodies was demonstrated.

Plate Evaporators in All Ace Cabinets

Featured in the Ace line was a full-flooded, 100% prime surface plate evaporator. This plate is incorporated in the construction of all Ace farm and home freezers, ice cream dispensing and hardening cabinets, and soda fountains.

New Compressor Models In Baker's Line

Spotlight at the Baker booth fell on the company's latest model ammonia compressor, F82. This unit is equipped with a 75-hp. motor mounted as a unit on structural steel supporting base.

Baker's ammonia compressor, Model F6B, manufactured in a range of from 7½ through 20 hp. was also shown, as was the Model F14BA, featured for air conditioning applications within the 20, 25, and 30 hp. range.

'Turbo-Flo' Panel Coolers for Reach-Ins

The Marlo line spotlighted the "Turbo-Flo" turbine blowers, manufactured in four sizes from 120 to 780 c.f.m. In addition to this wall-type panel cooler, the newest in the Marlo line of cooling towers was shown.

Featured also was a line of coils, evaporative condensers, and a new type of ceiling unit equipped with Venturi fan rings, integral heat exchangers, and thermal valves.

Home Freezers, Milk And Beer Coolers

Two different types of Masterbilt home freezers were shown to show visitors, the "Farm Special," and a line of freezer models in various capacities. Also featured was the "Cold Wall" milk cooler, and an 8½ ft. bottle beer cooler, said to cool 40 cases of beer at one time. The direct-draw beer cooler was also displayed.

New Developments For Moisture Control

Full line of DFN dehydrators, strainers, and filters were shown, as well as special types of dehydrators specifically adapted for hermetic units, water coolers, and sharp freeze assemblies.

Claiming the center of attention was a demonstration of a new McIntire development for the control of moisture in refrigerating systems.

One Cooler Pre-Chills, Ages, and Freezes

A complete frozen food unit, the Model 200 freezer-cooler, was a leader in the Amana display. This unit combined facilities for pre-chill, aging, sharp freezing, and frozen food storage. Freezer section of this unit is completely self-contained. The unit is 8 ft. long, 4 ft. deep, and 6 ft. 10 in. high.

Also displayed was the Model 30R, 30 cu. ft. freezer and storage cabinet. This upright model is equipped with sharp freezer plates with holdover solution said to guarantee against food spoilage due to power failure.

Home freezer models 110 and 50, 10½ and 5 cu. ft. capacity, respectively, were of top open lid construction, featuring a "waist-high" convenience design. These units are powered by hermetically sealed compressors.

'Typhoon' Air Conditioners In 3 to 10 Tons

The "Typhoon" line of self-contained air conditioning units were on display. In the self-contained units, models in 3, 5, and 7-ton capacities were shown. Also shown was the 5-ton vertical-type low side unit. Demonstration of the applications of this equipment were given.

Double-Duty Frozen Food Case Holds 725 Packages

Center of interest at the Goodsell display was the double-duty frozen food dispensing cabinet. The cabinet has a refrigerated space of 25 cu. ft. and is designed to hold 515 frozen food packages, with a top capacity of 725 packages with drawers removed.

Bottled Coolers and Freezers by American

American Refrigerator & Machine, Inc.'s 1947 bottled beverage cooler was one of the main attractions. This unit is self-contained and is of 6 cu. ft. capacity. A newly designed frozen food dispensing cabinet, 15 cu. ft. capacity, was introduced at the show, with production on the unit scheduled to start immediately.

The redesigned 8 cu. ft. freezer shared the center of the stage in this exhibit. Also shown were the 8 cu. ft. farm and home freezer and the 15 cu. ft. dual purpose freezer.

How Cold Storage Door Should Operate

Butcher Boy Cold Storage Door Co. set up its booth to show "How a Cold Storage Door Should Operate." Visitors who stopped to look over the full-size cooler and Super-Freezer doors and locking devices could be seen testing the slender "Finger-Tip" door openers.

Factory representatives used a pressure indicator to demonstrate that finger-tip pressure is sufficient to open heavy cold storage doors because of the openers' "8 to 1 leverage ratio." They pointed out that the simple design of the openers eliminates the need of push rods, which frequently stick, freeze, or bend.

Charging Hose and Vibration Eliminator

Highlighted in the American Brass line of tubing and fittings was the charging hose and vibration eliminators. In addition to the flexible metal hose, a full line of tubing and fittings was on display.

A MASTERPIECE in Thirst-quenching Convenience

OASIS ELECTRIC WATER COOLER

You're always *Sure* with an OASIS-built by EBCO, pioneers in the electric water cooler field.

The EBCO Mfg. Co.
401 W. Town St.
Columbus 8, Ohio

FROZEN FOOD CABINETS
24 cu. ft. with super structure, glass top, fluorescent fixture.

CONDENSING UNITS
½ & ¾ H.P. Heavy duty; suitable for any refrigerant.
Franchises Open.

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Columbus 5-5888

HEAT TRANSFER EQUIPMENT
MARLO COIL COMPANY
SAINT LOUIS, MISSOURI

Pulleys, Flywheels
V-Groove Pulleys, 1 and 2 grooves, from 2" to 7"
Flywheels up to 18", spoke and fan type
These pulleys made from best quality grey iron
Write for Quotations
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STANGARD
Prime Surface
COLD PLATES
For Maximum Refrigerating Efficiency

THE STANGARD-DICKERSON CORPORATION
46-76 Oliver Street · Newark 5, N. J.
STANGARD KNOWS REFRIGERATION
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it's here...the control that's NEW and DIFFERENT!

never before... a control with 2-pole construction

You've never seen such a control before . . . because never before was there such a refrigeration control as the PENN Series 270.

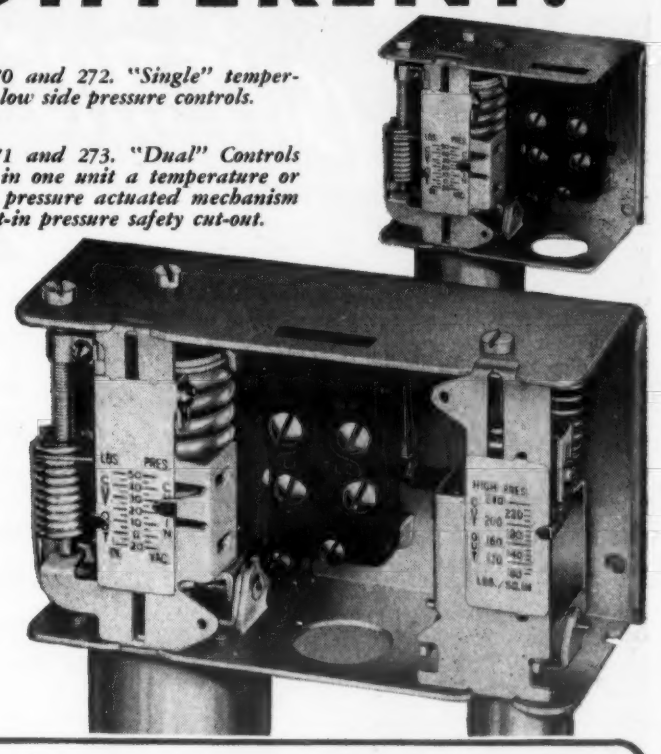
It's the first and only one in the refrigeration and air conditioning field that incorporates a load-carrying 2-pole construction.

The many new design features give greater dependability, greater accuracy, increased safety, better electrical performance, ease of installation and simple adjustments.

Penn Electric Switch Co., Goshen, Ind.,
Export Division: 13 E. 40th Street, New York 16, U.S.A. In Canada: Penn Controls, Ltd., Toronto, Ont.

Series 270 and 272. "Single" temperature or low side pressure controls.

Series 271 and 273. "Dual" Controls combine in one unit a temperature or low side pressure actuated mechanism and built-in pressure safety cut-out.



8 Star Features 8

★ Double-pole construction provides versatility of application . . . and gives greater protection.

★ Direct-reading, visible, calibrated dial shows operating cut-in and cut-out points . . . simple adjustments. "Dual" Controls have visible calibrated scale showing high pressure cut-out point.

★ Calibration or accuracy of performance not affected by vibration or mounting position.

★ Full range of differential adjustment in one model.

★ Two temperature ranges cover all requirements.

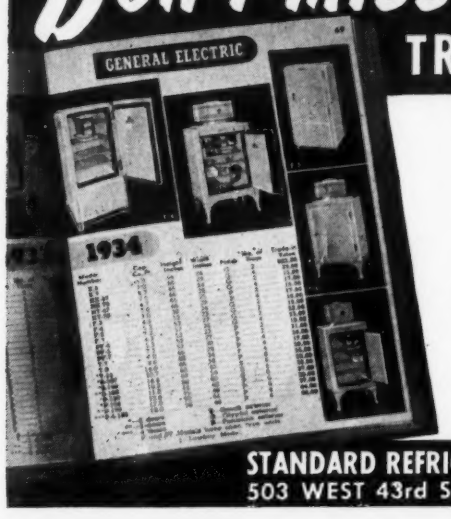
★ Sturdy contact mechanism with better electrical performance.

★ Large block assembly with terminals molded internally for strength and permanency.

★ Modern, attractive, high tensile strength plastic cover.

PENN
AUTOMATIC CONTROLS
FOR HEATING, REFRIGERATION, AIR CONDITIONING, ENGINES, PUMPS AND AIR COMPRESSORS

DON'T MISS the 1946 TRADE-IN MANUAL!



The only COMPLETE DEALER GUIDE on HOME REFRIGERATION

Identify more than 2900 refrigerators manufactured since 1928. Complete specifications — More than 900 photographs — Sound trade-in values. Pocket-Size — 256 pages.

SEND $5 WITH ORDER OR REQUEST C.O.D. SHIPMENT

STANDARD REFRIGERATOR TRADE-IN MANUAL CO.
503 WEST 43rd STREET NEW YORK 18, N. Y.

3 Air Conditioning Jobs Turned Down in Alabama By CPA District Office

BIRMINGHAM, Ala. — Three proposed air conditioning projects were recently disapproved by the Civilian Production Administration district office here.

The rejected air conditioning projects had been sought by Rheem Mfg. Co., Birmingham ($5,250); Mary Beard's Tea Room, Birmingham ($7,744); and Parisian, Inc., Birmingham ($14,409).

Construction projects approved by the district CPA office included a $30,000 frozen food locker plant by J. B. Faulkner & Associates, Blountsville.

Servicing Truck Refrigeration Units

Instalment No. 7

Recommended Temperatures for Hauling Perishables

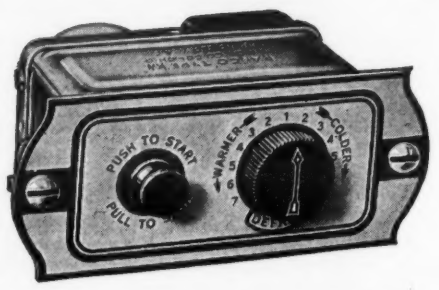
Sometimes truck operators will complain to refrigeration service men that the refrigeration unit is not operating properly. The trouble frequently is not in the unit itself, but in the improper handling of it. Various foods differ in their freezing points as well as optimum storage temperature.

Although the following list is intended primarily for truck operators, it should be noted carefully by refrigeration mechanics also. A service call on a truck unit might really be caused by an operator's trying to haul perishables at the incorrect temperature, instead of faulty operation of the refrigeration unit.

Commodity	Storage Temperature	Approximate Storage Life	Average Freezing Point
Apples	30–32		28.4
Apricots	35–40		
Artichokes			
Globe			29.1
Jerusalem	31–32	2-5 months	27.5
Asparagus	32	3-4 weeks	29.8
Avocados	40–55		27.2
Bacon	30–35		
Bananas	56		29.8
Beans			
Green or snap	32–40	2-4 weeks	29.7
Lima	32–40	2-4 weeks	30.1
Beef—Fresh			
short carry	35		
long carry	30		
Beef—Salt	40		
Beer (In barrels)	32		
(In bottles)	45		
Beets			
Topped	32–35	1-3 months	26.9
Bunch	32	10-14 days	
Berries—fresh			
short carry	40		
Blackberries	31–32	7-10 days	28.9
Broccoli (Italian)	32–35	7-10 days	29.2
Brussels Sprouts	32–35	3-4 weeks	
Celeriac	32	3-4 weeks	
Buckwheat Flour	42		
Butter	20–35		
Cabbage	32	3-4 months	31.2
Cantaloupes			
short carry	40		
long carry	33		
Carrots			
Topped	32	4-5 months	29.6
Bunch	32	10-14 days	
Cauliflower	32	2-3 weeks	30.1
Celery	31–32	2-4 months	29.7
Cheese—long carry	35–40		
Cherries	31–32	10-14 days	
Chestnuts	34		
Cider	32		
Cigars	42		
Coconut, milk	32–35	1-2 months	30.4
Flesh	32–35	1-2 months	25.5
Corn (sweet)	31–32		29.0
Corn—dried	45		
Cornmeal	42		
Cranberries	36–40	1-3 months	27.3
Cream (short carry)	33		
Cucumbers	45–50	10-14 days	30.5
Currants (short carry)	32		
Dried Fruits	32–50	9-12 months	
Eggs	30–35		
Eggplants	45–50	10 days	30.5
Endive	32	2-3 weeks	30.9
Florists' Stocks			
Fern (leaves)	32–45	2 wks.-4 months	23.6
Lilies, bulb	35–40	6-8 months	
Lilly-of-the-Valley pips	28	4-12 months	
Figs	55		
Fish—not frozen (short carry)	28		
Fish—freshwater, frozen	18		
Fish—salt water not frozen	15		
Fish—dried	40		
Frozen—pack fruits	10–0	6-12 months	
Frozen—pack vegetables	10–0	6-12 months	
Fruit—canned	40		
Furs	28		
Game (short carry)	28		
(frozen)	10		
Garlic	32	6-8 months	25.4
Ginger Ale	36		
Gooseberries	36–40		
Grapefruit	32–36	6-8 weeks	28.4
Grapes			
European type	30–31	3-6 months	21.9
American type	31–32	3-5 weeks	27.5
Ham—not brined	20		
Hogs	30		
Honey	45		
Hops	32		
Horse-radish	32	10-12 months	26.4
Huckleberries—frozen	20		
Ice	28		

(To Be Continued)

ENGINEERED FOR Accuracy — Ranco REFRIGERATION CONTROLS

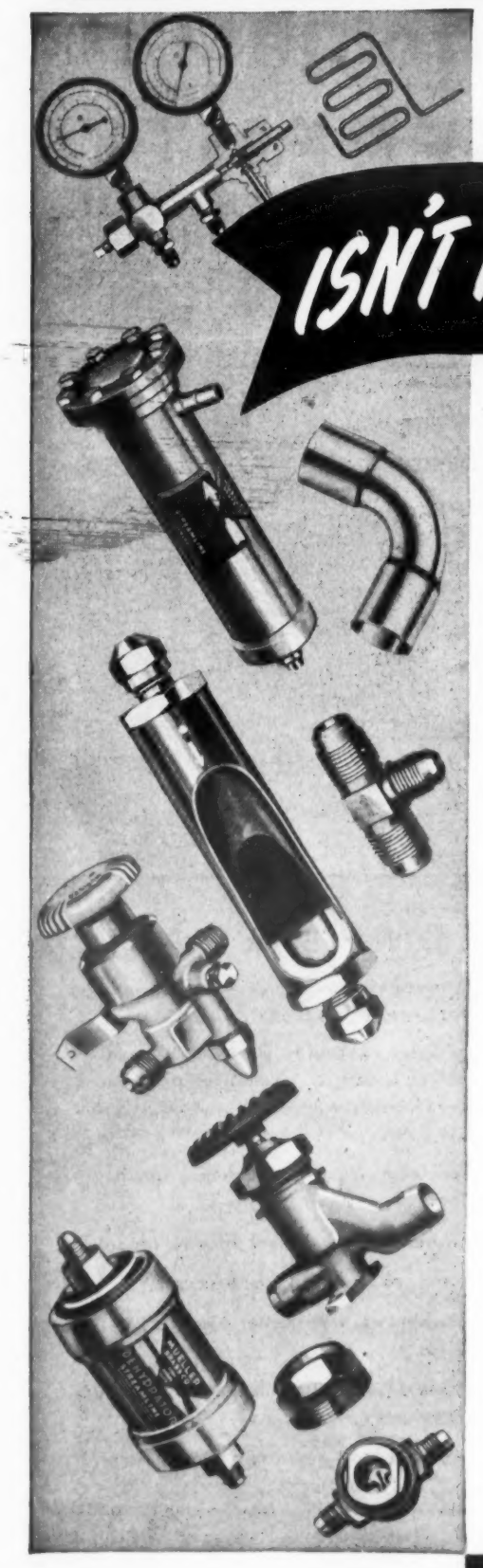


Control Type KWS—for general replacement.

√Stainless Steel Working Parts.
√Sturdy Construction.
√Rugged Service—Economy—Long Life.
√Exact and General Commercial and Household Replacements.

Ask your Jobber for the RIGHT Ranco Control.

Ranco Inc. COLUMBUS 1, OHIO



ISN'T THIS THE FAIR WAY?

LIKE any other progressive concern, we want and value new business, but we feel that our first obligation is to those wholesalers who have been our consistent and valued customers for years.

We want our regular wholesalers to know that we will not take on any new outlets until such time as we can, through our increasing production, supply all with adequate stocks of our products to fill their normal demands. We believe that this is the only fair way.

BUILT-IN QUALITY
TIME-TESTED PERFORMANCE

Mueller Brass Co. valves, fittings and accessories are sturdily and dependably built. They have a well-earned reputation for built-in quality and time-tested performance.

The Mueller Brass Co. line of refrigeration products is exceptionally complete, and all products are designed and manufactured specifically for mechanical refrigeration work. Tees, nuts, and elbows are made of forged brass—and many other fittings, bodies, etc. from specially processed brass rod.

ORDER THROUGH YOUR WHOLESALER

MUELLER BRASS CO.
PORT HURON, MICHIGAN

Developments Revealed at Show Will Open Up Sales, Service Opportunities

Three New Products Made Available by Acme

Acme Industries, Inc., showed off three new products for the first time. They are:

A direct expansion "Freon" water chiller of the shell and tube type. A cutaway section showed head construction, tube layout, and baffles.

A new style evaporative condenser, with many new construction features.

The new-type oil separator featuring replaceable filter cartridges both on the gas inlet and outlet. A cutaway section of the separator was displayed. The separator is available to jobbers under a new policy.

Curtis Shows Improved Conditioners, Compressors

Of special interest in the two booths occupied by Curtis Refrigerating Machine Division of Curtis Mfg. Co. was one of its new 1947 5-ton packaged-type air conditioning units. Showing all working parts and many new features, the unit was said to be representative of the line ranging from 3 through 15 tons.

Several commercial condensing units were shown, including one 15-ton shell and tube unit and several smaller ones. All compressors embody new Curtis cylinder and valve designs.

A working model demonstrating the Curtis patented pressure lubricating system was in operation.

'Thermobank' and Unit Coolers by Kramer-Trenton

An average of 350 persons daily stopped at the Kramer-Trenton booth to watch operation of the Thermobank System demonstrated by means of a working model, according to Harry Klingler, sales manager.

"There was a peculiar thing about this show," Mr. Klinger commented. "Usually people come into the booth and ask, 'What is this?' At this show, 90% stopped to say they were users of the Thermobank System."

The system is claimed to provide completely automatic defrosting for low temperatures.

Other products exhibited were the new Kramer Curvette unit cooler, the Kramer radial unit, and the Kramer panel unit.

Propeller Fans and Freezers by Bishop

To introduce another of its lines, The R. H. Bishop Co. displayed two typical models of propeller-type fans especially designed and adapted for postwar housing, commercial, and industrial applications. It was the first time the Bishop fan had been exhibited.

Also on display was the Bishop food freezer, featuring 16 cu. ft. of freezing and storage space, Medial Octo-Plane freezing, hermetically sealed insulation, and single heavy lid on "floating" counter-balanced hinges.

'Windows' Permit View Of Mills Unit 'Insides'

Mills Industries, Inc., had an operating model of the new ⅓-hp. direct-drive condensing unit hooked up to a low side coil. Visitors peered through illuminated "windows" in the crankcase to inspect component parts and assembly and to watch operation of the pressure lubrication system.

Other products on display included the Coca-Cola bottle dispenser and the 5-gal. ice cream counter freezer and combination hardening dispensing cabinet.

New Sizes and Styles In Kold-Hold Plates

Set up for inspection in the Kold-Hold booth were the following products from the firm's expanded plant:

A plate bank unit, a plate stand unit, a conversion plate, a 6-cu. ft. cabinet liner, and a "hold-over" truck plate. The conversion and truck plates were in operation.

A Kold-Hold spokesman noted that the cabinet liners are now produced in four standard sizes. To the 6 and 10-cu. ft. models, the company recently added 16 and 20-cu. ft. units.

Cutler-Hammer Booklet Offers All Control Data

Along with exhibition of its complete line of domestic, semi-commercial, and commercial refrigeration controls and various accessories and auxiliary equipment, Cutler-Hammer, Inc., displayed its new 49-page "Refrigeration Control" catalog.

Cutler-Hammer calls the booklet "the most complete and easy to use catalog of refrigeration controls, parts, and accessories in the industry." It includes detailed specifications, selection data, and other information and suggestions.

Two features of the two C-H booths were displays of a Jumbo-size model of the firm's Universal replacement control and the new C-H freezer alarm switch. Also shown were typical custom-built controls, exact replacement controls, selected items from the C-H line of general-purpose motor control, and others.

Aluminum Walk-In Model Freezes, Stores

Center of attraction was the pre-fabricated, all-aluminum walk-in freezer of Refrigeration Corp. of America. Uses of the freezer for the freezing, hardening, and storage of frozen foods and ice cream were highlighted. Features of the "Frigid-Freeze" unit were pointed out as blast freezing, automatic defrosting, alarm system, and outside indicating thermometer.

The unit, pre-fabricated in standardized sections, has a special locking device designed to cut time of erection. Each section is interchangeable. The door and self-contained refrigeration equipment may be placed where desired.

Ice Cube Maker Also Serves as Dispensing Unit

Claiming the center spot in the United Refrigerator Mfg. Co. display was an ice cube maker and bar dispensing unit. Rounding out the display of United commercial units was a two-temperature walk-in, a medium temperature walk-in, a low temperature reach-in case, and a double-duty display case.

Also shown was a direct draw beer dispenser and a bottle cooler.

Insulating Blocks for Cold Storage Construction

A model of a new cold storage floor construction showing the use of precast blocks of Zonolite insulating concrete was the feature of this display.

Cutaway section of the model showed the use of Zonolite refrigeration fill between the concrete blocks in the floor. Data on the use of Zonolite material in cold storage and locker storage applications was available.

FlakIce Machine, Freezers Dominate York Display

The Model DER-10 FlakIce machine was in operation in this exhibit as one of the features in the York line. Two new frozen food cabinets were given their postwar refrigeration exposition exhibition. These models were No. 165, 16½ cu. ft., and the Model 350 (locker type) with a capacity of 32⅝ cu. ft. In addition the new freezer door was shown, as well as the York line of condensing units and air conditioning units.

We Manufacture XL
'Freon' Compressors and Condensing Units (1 to 10 h.p.)
Ammonia Compressors 4x4 — 5x5 — 6x6
Ammonia Valves 1/4" to 5" Screwed and Flanged
ALSO
Ammonia Flanges—Strainers—Discharge Check Valves
AIRCRAFT PRODUCTION ENGINEERS
DIVISION OF
THE XL REFRIGERATING CO.
1834-42 WEST 59th STREET CHICAGO 36, ILL.

FOR IMMEDIATE DELIVERY
2-York Model 5-34 Ice Making Plants
New—Complete with all equipment, accessories and spare parts
Manufactures 72 100-lb. cakes of ice per day.
$7500 Each F.O.B. Ogden, Utah
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MECHANICAL REFRIGERATION
THE WATCHDOG OF THE NATION'S FOOD SUPPLY
LARKIN
USE LARKIN
Humi-Temp Forced Convection Units—Patented CROSS-FIN-COILS—Bare Tube Coils—Disseminator Pans—Heat Exchangers—Evaporative Condensers—Instantaneous water Coolers—Zinc Fused Steel Plate Coils—
See your jobber or write for details now.
LARKIN COILS,
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"ADVANCED" REFRIGERATION COMPRESSOR
THE ALL-PURPOSE REFRIGERATION COMPRESSOR
AA
For anything that a ½ HP refrigeration compressor can handle, the "ADVANCED" Model 100 is *it!*
Made in our own plant to our own design, right from the raw materials.
For specifications and other information, write or phone to address below, Dept. A-3.
Model 100—1¾" x 1½"—2 cyl., flywheel 10" diam., 2-groove "A" section—½ HP. *For use only with Freon refrigerant.*
AVAILABLE TO MANUFACTURERS AND JOBBERS
ADVANCED AIRCRAFT, INC.
Compressor Division
Cornwells Heights, Pennsylvania
Cornwells 0564
THE COMPRESSOR YOU CAN DEPEND ON

Safe Refrigeration
builds more customers for cabinet manufacturer

This is the new Kold-Hold factory. From it, in steady flow, come those adaptable, flat, tubeless refrigeration plates . . . for which new and different applications are being discovered every day. In locker plants, Kold-Hold plates are mounted in stands, boxes, banks or shelves. In refrigerated trucks, efficient flat Kold-Hold "Hold-Over" plates save valuable pay load space. Built up the night before, they hold the cold at desired temperature through all the day-time miles. And this manufacturing corporation of Brooklyn* has found still another use . . . the liner cooling unit in frozen food display cabinets.

This is a happy grocer. He has solved the problem of displaying packaged frozen foods. His cabinet permits him to put the colorful packages right out in the middle where customers can see and be influenced by their eye appeal . . . without losing an iota of the crisp cold the packages require. His supply rests in a 20 cubic foot storage compartment, lined with one complete Kold-Hold Liner. An angled mirror displays his entire line to customers in all parts of the store . . . although the packages are stored at safe temperatures below the black border.

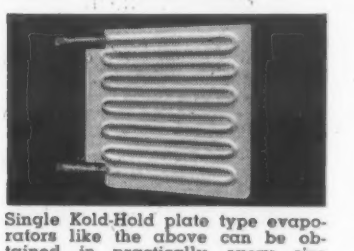
This is a happy shopper. The cabinet with the Kold-Hold liner permits her to walk right up to the display . . . look 'em all over and make her choice on the spot. And when she makes her purchase, she doesn't get a dewy, dripping package from some mysterious spot in a big walk-in refrigerator. Instead . . . a crisp, dry package, cool to the touch, with contents properly temperatured . . . cold enough to hold until it's transferred to her own home locker or refrigerator . . . thanks to Kold-Hold.

*Name of mfg. on request.

For locker plants where perishables are quick-frozen, these Kold-Hold plate bank units are suspended from the ceiling, replacing cumbersome pipe coils, providing constant, economical temperature. The unit can be series connected or manifolded with almost any number of plates.

Kold-Hold serpentine plate stands are designed for sharp freezing and holding. Plate stands are connected in series, the number of plates per valve depending on plate size.

This standard Kold-Hold liner (use in cabinet illustrated) embodies a technique of fabricating serpentine plate evaporators into one unit, eliminating refrigerant joints. Refrigerant flow is uninterrupted. Easily installed and maintained, ideal for sharp freezing, cooling and holding of perishables.



Single Kold-Hold plate type evaporators like the above can be obtained in practically every size . . . can be adapted to an amazing number of uses. This basic Kold-Hold unit has channels of stamped steel, eliminating tubes and piping except at inlet and outlet points.

On the road, Kold-Hold "Hold-Over" truck plates can be installed in numerous ways to fit the needs of your truck. They create greater pay load space . . . cold is built up at night and holds over the desired temperature all through the day. Plates can be charged at the plant or on the road, by means of a truck-carried generator unit.

KOLD-HOLD
Jobbers in Principal Cities
PROCESSING TRANSPORTATION STORAGE
protects every step of the way
KOLD-HOLD MANUFACTURING COMPANY - 500 E. HAZEL STREET, LANSING 4, MICHIGAN

When Manufacturers and Wholesalers Got Together at Social Events

(Above, left) Manufacturers and parts and equipment wholesalers mingle amicably before one of their luncheons. L. to r. Ed Graff and C. E. Whipps, Ranco, Inc.; J. L. Homan, Allied Supply Co., Dayton; George Vermilye, Ansul Chemical Co.; Herman Goldberg, Herman Goldberg Co.; B. F. Harris, Harris Supply Co., Grand Rapids.

(Above, center) Herman Spoehrer, Sporlan Valve Co., R.E.M.A. president; L. C. McKesson and F. J. Hood, Ansul Chemical Co.; R. K. Hanson, R.E.M.A. executive secretary; and (handing out a ticket) K. B. Thorndike, Detroit Lubricator Co., All-Industry Show chairman.

(Above, right) Ed Lee, Lee Equipment Co., Detroit; H. Whiting Holt, Wm. Orr Co., Pittsburgh; Russ Duncan, Duncan Supply Co., Indianapolis; H. D. Stehle, Wm. Orr Co.; Robert Sheperdson, Standard Supply, Worcester, Mass.

E. Champion, Lifsey Distributing Co., Flint, Mich.; Mrs. F. H. Langsenkamp, Jr., F. H. Langsenkamp Co., Indianapolis; Mrs. Jack Berry, Louisville, Ky.; Ed Ferrill, Kerotest Mfg. Co.

M. W. Voss, M & V Supply Co., Oklahoma City; C. W. Harris, Harris Supply, Grand Rapids; Ted Chamberlin, United Commercial Sales Co., Los Angeles; G. C. Armour, Fresno.

Frank Riley, Detroit; Mrs. Riley; J. M. Oberc, J. M. Oberc, Inc., Detroit; Al Mattes, J. M. Oberc, Inc.; Mrs. Oberc.

(Pictures by Austin Jones, the Kerotest Mfg. Co. All identifications read from left to right.)

L. C. Keeley and W. H. Hoenie, Airo Supply Co., Chicago; R. R. Dunlop, Ranco, Inc.; Russ Cook, Herman Goldberg Co.; Mrs. Austin Jones; Frank Pond, Refrigeration & Industrial Supply, Minneapolis.

Howard Hubbell and Earl R. Gruebbel, Brass & Copper Sales Co., St. Louis; R. J. O'Flaherty, Refrigeration Supplies, Cleveland; Manuel Brown, Brass & Copper Sales; W. J. Kerr, John Lucas, and Fred L. Fuller, the Yoder Co.

E. L. Bengston, Republic Electric Co., Davenport, Iowa; J. W. Cavataio, Robert Byrne, and R. W. Serth, Illinois Electric Works, Springfield, Ill.; Wm. Ayres, Ayr Corp., Evanston, Ill.; M. E. Maxwell and J. F. Wickham, Wickham Supply Co., Lincoln, Neb.; William Bradfield, Manufacturers' Fin Coil Co.; Vernon Atwood, Republic Electric Co.

Lavell Whatcott and Arthur Sheldon, Salt Lake City; G. C. Armour, Fresno; R. L. Hinshaw, San Francisco; R. Morton, A-P Co.; H. F. Brockgreitens, St. Louis; Del Moerick, A-P Co.; L. W. Krueger, St. Louis; James Monroe, Oakland, Calif.; Wm. Davidson, San Francisco.

Consumer Can't Recover 'Leftover' Deposits on Appliances, Court Rules

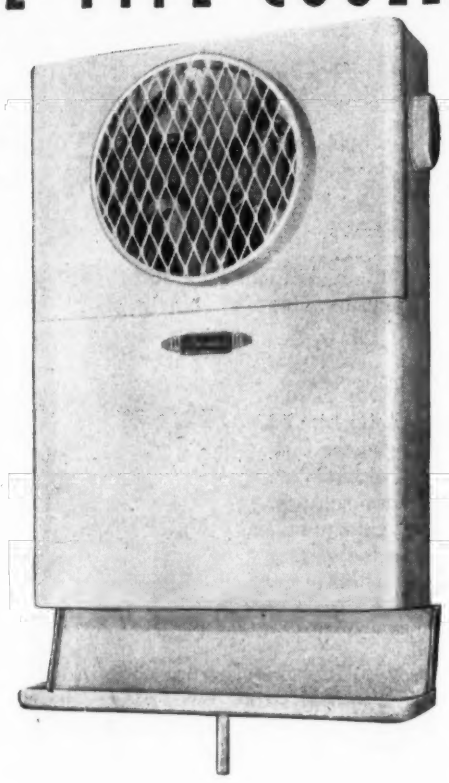
SACRAMENTO, Calif.—The State Department of Justice has delivered an opinion that customers who place deposits on orders for refrigerators, washing machines, or other scarce appliances at five or six stores have no legal recourse to recover the "leftover" deposits after one merchant delivers.

The opinion is expected to cut down the practice of "smart" buyers who place orders for the same article in several places simultaneously. Suppliers have complained that this practice disrupts their estimates of requirements from manufacturers and confuses the overall production requirement picture.

Such a condition is costly both to the merchant and the manufacture, they argue, adding that the merchant must protect himself against the rapidly increasing perils of "no show" orders.

While admitting that the merchant who accepts an order in good faith is neither legally nor morally bound to return the binding deposit, state law enforcement officials warned that they are on the lookout for any racketeering. Unscrupulous dealers who accept orders and deposits with no intention of ever filling them "will not last long," the officials stated.

THE KRAMER
PANEL TYPE COOLER



Here shown is the latest Kramer Panel Unit for Reach-in and Walk-in Refrigerators. Its flat, thin proportions occupy but a minimum of usable space; its fan motor and expansion valve are easily reached without removing refrigerator shelves; and its down-draft, back-wall air delivery distributes the cool air uniformly throughout the refrigerator. All units have a built-in, double tube heat interchanger to assure efficient coil and expansion valve operation.

Send for Bulletin TV-345-N describing this and other types of Kramer Evaporators.

"IT'S THE COILS THAT COUNT" specify KRAMER

KRAMER TRENTON CO.
HEAT TRANSFER EQUIPMENT
TRENTON 5 • NEW JERSEY

Specify
CHICAGO SEALS
for
PERFECT BALANCE
MODERN DESIGN
CHICAGO SEAL CO.
20 N. Wacker Drive, Chicago 6, Ill.

Food Conservators
Is Our Only Business
All our energy and resources are devoted to their development and production. Write for particulars.
Master Manufacturing Corp
121 Main St. Sioux City, Iowa
800,000
Master Food Conservators in Use

Show Visitors Stooped, Squatted, and Squinted at the Exhibits

Bill Carmody and Bill Wischmeyer of Sporlan Valve greet Leon Young, Detroit wholesaler.

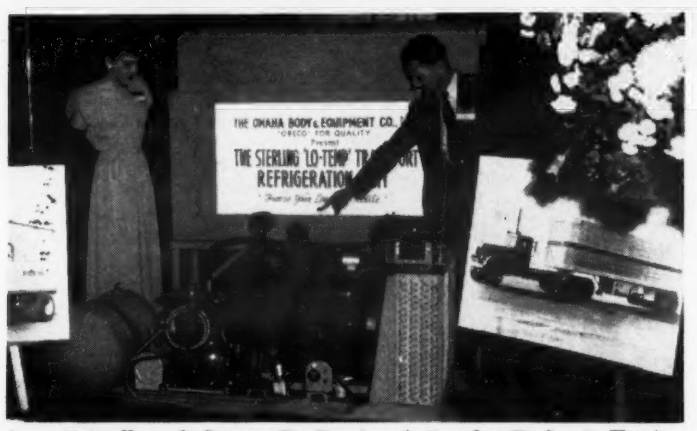
Drayer-Hanson's "Airtopia" reverse cycle unit interests H. L. Quinn, New York City.

Allen P. Livar and Fred J. Wetjen with new Livar compressor.

Art Schellenberg, from Arizona, stops for a drink from an Ebco "Oasis" water cooler.

In the Superior Valve & Fittings Co. booth, W. A. Siegfried (second from right) demonstrates a new product.

A new method of controlling moisture in systems is explained by L. S. Dunn of McIntire Connector Co.

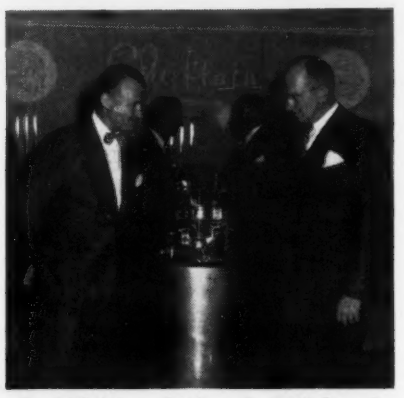


Ann Carroll and James R. Davis of Omaha Body & Equipment Co. with Sterling truck cooling system.

One of the models in the new line of small radial-type compressors holds the center of attention in the Chrysler Airtemp exhibit.

Real interest is demonstrated by this group who are literally down on their knees to view a Tyler self-serve display case.

Picking up some new product tips in the Day & Night Co. booth are (l. to r.) Paul Shapero, Superior Ref. Supply, Kansas City; Lou Snell, Snell Refrig. Supply, Dallas; J. W. Rubenson, Day & Night; W. C. Piatt, Piatt Air Conditioning, Jackson, Miss.; and W. J. Lambert, Day & Night.



H. Whiting Holt of Pittsburgh and Joe Parker of Atlanta inspect a Tecumseh unit.

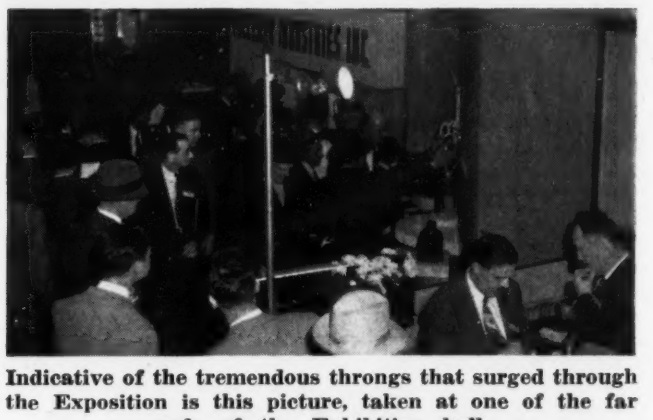
A new Ranco control occupies the attention of M. S. Vardis of Ranco; John Craig, Crosley Corp. engineer; and Ed Graff, Ranco.

One of the big, heavy-duty compressors in the Brunner booth gets careful scrutiny by two visitors.

W. W. Meyer shows the Rotary Seal Co. seal surface tester to A. B. Benson, Benson Refrigeration, Hammond, Ind., as Charles Muller looks on.

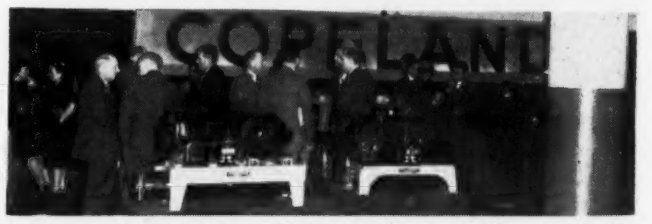
Mills' direct-drive unit intrigues D. Eastlick, Sharon, Pa.; W. Gulley, Farrell, Pa.; Charles Landrith, Detroit; George Hayden, Tarr, Pa.; M. W. Schwartz, Sharon, Pa.

H. J. Nettler, Curtis, talks with Max Sussmann, Greater N. Y. Refrigeration Engineers, as Arnold Lohbauer, Lohbauer Electric, Elgin, Ill., inspects a new model.



Indicative of the tremendous throngs that surged through the Exposition is this picture, taken at one of the far ends of the Exhibition hall.

Another crowd shot, near the Mueller Brass booth.



A "peep show" device which permitted visitors a special kind of a squint at a compressor in operation helped to draw big groups like this to the Copeland booth.

(Pictures on this page by Austin Jones, Kerotest Mfg. Co.; and Irving Alter, the Harry Alter Co.)

Mrs. L. S. Worthington of Kold-Hold Mfg. discusses a holdover truck plate with B. P. Fortney, Fortney Body Co., Cleveland, as H. C. Hoover of Kold-Hold stands by.

At the Lynch exhibit are J. S. Borton, Borton Ref. Service, N. Liberty, Ind.; Rex Aumend, Lynch; A. E. Borton, North Liberty, Ind.; B. J. Scholl, Lynch.

Show Revealed Wide Scope of Products In Commercial Refrigeration Field

Jordon Models for All Types of Applications

Models of Jordon frozen food display cases, home and farm freezers, reach-in refrigerators, and beverage coolers were displayed at the company booth at the All-Industry Show.

The frozen food cases come in 16 and 22-cu. ft. sizes. The 16-cu. ft. case also is equipped with a detachable display board and mirror. All models are self-contained.

The home freezer also has 16-cu. ft. capacity. The company makes four models of reach-in refrigerator, one of 65-cu. ft. capacity and three of 42-cu. ft. capacity. The 42-cu. ft. models include a normal temperature unit, a dual temperature unit, and an all low temperature unit. Recommended compressor sizes range from ⅓ to ¾ hp.

Firm Shows Truck Unit, Packaged Conditioner

Models of the young Sterling Refrigeration Co.'s new low temperature transport refrigeration unit and its new 3-hp. air conditioning unit were displayed at the All-Industry Show.

The "Lo-Temp" truck unit is described as a heavy duty air cooled refrigeration unit using "Freon-12." It is said to have been tested and operated under the most severe and adverse climatic conditions.

The unit is equipped with a two-cylinder vertical reciprocating single action compressor. The condenser has ⅜ in. copper tubing with aluminum alloy fins and casing. The evaporator contains six rows of copper tubing with single serpetine top feed. The coil is fed by a six pass multi port thermal expansion valve with external equalizer with 10° superheat setting.

The unit is powered by a four cylinder v-type air cooled engine with 15-hp. capacity rated at 1,800 r.p.m.

Unusual feature of the air conditioning unit, displayed with the transport refrigeration unit, is that the conditioned air is released into the room through a grille only a few inches above the floor. The air released is said to be dry.

These units are not yet in production, according to Elvin C. James, vice president.

Ideal Offers Freezers, Beverage Coolers

Louis Weiss, president of Ideal Cooler Corp., and other representatives answered questions about the following items of equipment on display:

A 20-cu. ft. frozen food cabinet, an 8-ft. blower-type dry beverage cooler, and a 2½-bbl. draft beer cooler.

Ease in Use, Assembly Claimed for New Valve

A new "Life-Time" diaphragm packless hand valve with in-line valve connections on the same plane was introduced by Superior Valve & Fittings Co. of Pittsburgh and was given the most prominent display in the company's booth.

Special features claimed for the new valve include ample wrench flats for individually tightening flare connections and a valve body design which permits soft or silver soldering without the necessity of removing the internal mechanism.

Said to perform satisfactorily under pressures up to 300 p.s.i. with flow in the opposite direction, the valve has unrestricted flow and requires no special tools for disassembly and reassembly, the company claims.

Travel and seating of the valve are controlled, and design of bearing surfaces, stem heads, and lubrication all combine to assure "life-time" operation, according to Superior.

'Triple-Duty' Features Is Claim for Sterling Case

The Sterling, Jr. triple-duty counter top refrigerated display case received top billing at the Minneapolis Showcase & Fixture Co. booth at the All-Industry Show.

The case, which stands only 31 in. high, is designed for small stores where floor space is valuable. In it, the storekeeper can combine the functions of a wrapping counter, a refrigerated showcase, and refrigerated storage compartment, according to F. E. Jernberg, executive vice president.

Sterling, Jr., comes in 6 and 8-ft. models. A 2-ft. compressor housing is attached right to the end of the case.

The case is now ready for national distribution, Mr. Jernberg said.

Tecumseh Shows Both Hermetics & Standard Units

New developments in hermetic units and conventional compressors keynoted the Tecumseh exhibit. Cutaway section of a complete hermetic motor compressor, operating in a glass dome was in the center spot.

Standard line of "Chieftain" compressors and condensing units was shown in capacities from ⅛ to ½ hp. The cutaway display technique was used in playing up the features of the Tecumseh line.

Evaporators Offered In Stainless Steel

Standard's full line of stainless steel evaporators was the feature item in the display of the Standard Refrigeration Co.

Various models of receivers and condensers, counter-flow and shell and tube, were also displayed.

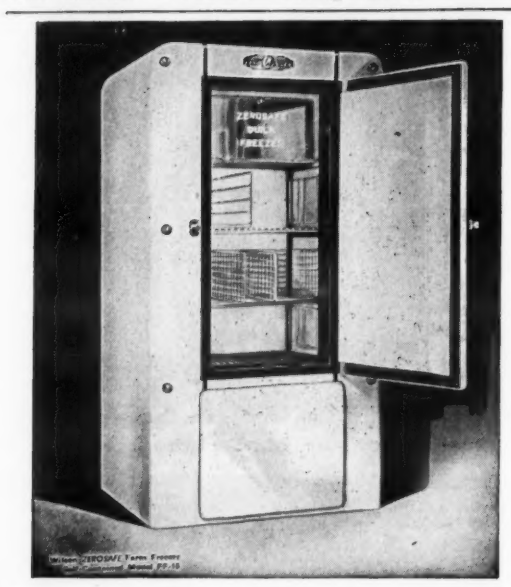
New 'StanZero' Freezer Is Put on Display

Occupying the center spot at the Stangard-Dickerson Corp. display was the new "StanZero" home freezer. Showing the working principle of all Stangard plates was a glass working model of a cold plate emphasizing the refrigerant flow through the plate.

The Stangard evaporator plate was shown in various applications, particularly emphasizing its use in soda fountain, home and farm freezer, and locker plant applications.

Insulation Permits Fireproof Construction

A "cutaway" section showing the fireproof construction of cold storage plant employing the use of ZerOcel insulation material was the main feature of the National Gypsum exhibit. Displays pointing up the use of ZerOcel insulation in a variety of applications in medium and low temperature refrigeration work rounded out the display.



Wilson ZEROSAFE Reach-In Farm Freezer Is Years Ahead...

SINCE 1939 Enthusiastic public acceptance and constant daily use have proved Wilson ZEROSAFE the greatest reach-in farm freezer in America . . . These years of trouble-free ZEROSAFE service are your guarantee that "Freezers by Wilson" will continue to revolutionize American menus by making frozen fresh foods a part of daily living. THE NEW ZEROSAFE IS NOW GREATER THAN EVER . . . There is a ZEROSAFE size for every need: 15 cu. ft. (illus.) and 25 cu. ft. Self-Contained Models; and Sectional Models from 22 cu. ft. up to 120 cu. ft.

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WILSON REFRIGERATION, INC.
DIVISION OF WILSON CABINET CO.
SMYRNA - DELAWARE

THERE'S MONEY IN COLD WATER!

Cash in now on the outstanding feature of the DUMORE Storage Tank Water-Cooler. This amazing advance in water-cooler engineering *sells on demonstration* . . . to schools, restaurants, hotels, bakeries, photographic studios . . . wherever cold water is needed in quantity. Thermostatically controlled to deliver *cold water* at pre-determined temperatures.

20% More Efficient . . . By actual test, the DUMORE storage tank water-cooler delivers 20% more performance than the average water-cooler. Scientifically designed and produced by a company famed for quality. It's a profit-maker and prestige builder because it delivers money-saving and money-making satisfaction. Add the DUMORE to your line.

SPECIFICATIONS

Model 30IT	Model 60IT
Height . . . . 42"	Height . . . . 72"
Diameter . . 17"	Diameter . . 17"
Weight . 100 lbs.	Weight . 200 lbs.

Galvanized steel *corrison-proof* all-welded tank, finished in baked gray crackle enamel. Low temperature insulation 2½" thick. Water inlet and outlet connections for standard pipe. Thermostatic control. Designed for either Methyl Chloride-Freon or Sulphur Dioxide coolants.

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NOW . . a cold-box type "Serviceman"

RANGE – 30° to + 65°!

Marsh does it again . . . first!

IT'S the celebrated Marsh "Serviceman" with range increased to match your ever-increasing work on quick freeze units. Yes, it now indicates from —30 to +65 degrees F. Along with this it has all the features of the original "Serviceman"—the same accuracy, same utility, same ability to tell you what's going on behind the closed door. Here is a "must" for your service kit.

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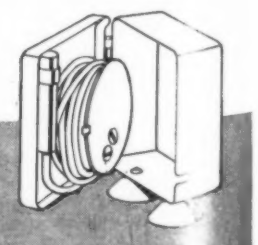
★ A heavy-duty precision movement, guaranteed accurate within one degree. Has Marsh "Recalibrator" to *keep* it accurate. Note hinged back containing bulb and 5 ft. of tubing slender enough to pass between refrigerator door and jamb. Suction cups prevent slipping and protect surfaces. The "Serviceman" is still available in ranges—10° F. to +100° F.



MARSH
Refrigeration Instruments

New Equipment for Wide Variety Of Applications Was Introduced

Refrigerated Salad and Sandwich Unit

A pilot model of an 8 ft. Norse King meat display case, the Norse King walk-in Cooler, and a refrigerated salad and sandwich unit manufactured by the National Cooler Corp. were exhibited at the All-Industry Show by the Cleveland Refrigerator Co.

The company expects to go into production on the display case soon.

It also displayed an inner freezer cabinet for quick freezing which fits into any Norse King walk-in cooler.

The salad and sandwich unit, made in 36 in., 42 in., and 48 in. models, is of all metal construction with front, top, roll cover, and lining of stainless steel. It has double rows of fin coils beneath the salad holding pans. Approximately 2 cu. ft. of refrigerated space lies beneath the coils.

National Cooler also manufactures a stainless steel refrigerated cabinet with salad unit top, beer dispensers, water coolers, beverage coolers, and other restaurant equipment.

Automatic Products Offers Eight New Valve Items

Eight new valves, including four expansion valves, two solenoids, a check valve, and a water regulating valve, which will be introduced by Automatic Products Co. in the first half of 1947 proved to be attention-getters at the company's booth in the All-Industry Exposition.

Leading the list are Models 211 and 212 expansion valves for "Freon-12," methyl chloride, and "Freon-22" which can be employed on low temperature units, commercial machines, and all air conditioning applications, claims A-P. The 211 valve is non-adjustable; the 212, adjustable.

Operation of these valves is claimed to be "simple and foolproof. The valve feeds the required amount of liquid refrigerant to the cooling unit without frostback and without excessive superheat so as to realize maximum efficiency exactly the same as any ordinary expansion valve," explains the company.

If, however, during pull-down period, or at any other time during its operation, the suction pressure builds up to the point of approaching motor overload, the overload diaphragm collapses and a spring moves the valve needle towards the closed position. However, during this operation the valve tends to continually throttle the feeding of the refrigerant. As soon as the heavy load condition changes, the overload diaphragm moves towards its normal position, and in moving the needle with it, the valve again operates in its normal manner under superheat control.

Model 212 comes with a 60-in. capillary; Model 211 (non-adjustable) is supplied with a 40-in. capillary. The valves will be available in ½, 1, and 1½ ton "Freon-12" capacities at commercial temperature ratings. "Freon" operating pressures are 15, 40, and 55 lbs.; for methyl chloride, 10 and 30 lbs. Reducing inlet fitting is a combination ⅜ and ¼ in. male flare, and the reducing outlet connection is a combination ½ and ⅜ male flare.

Model 304 automatic expansion valve is being introduced as a companion model to Automatic Products' 204 valve. The 304 has a capacity of 1 ton "Freon-12" and a range of 15 in. vacuum to 35 lbs.

Two solenoid refrigerant valves were also announced by Automatic Products at the Exposition. Model 163 is a small valve for low capacity applications and has a power consumption of 9 watts. It is rated at 1 ton "Freon-12" with a 2 lb. pressure drop, and is intended for use with "Freon," methyl chloride, or sulphur dioxide jobs. It operates under a maximum pressure differential of 200 p.s.i.

Incorporating the pilot-operated principle, the new Model 273 solenoid valve is intended for high capacity refrigeration installations. It has a maximum operating pressure differential of 200 p.s.i. with a power consumption of 16 watts. Model 273 is available in dual and single voltage moisture-proof coils, and comes with a mounting hose and bracket designed for vibration-free installation, the company claims.

The refrigerant check valve Model 234 will serve in multiple installations. Compressor-type valve disc seals on machined stainless steel valve seats are features of this new valve which experiences less than 1 lb. pressure drop at ½ ton "Freon," the company claims.

Although normally installed in the suction line of the low temperature evaporator in a multiple system, it can be operated on the high temperature evaporator in connection with A-P's Model 235-S suction pressure regulating valve.

Automatic Products' new Model 65 modulating type condenser water regulating valve employs the company's self-cleaning slide valve design. Balanced valve design prevents water hammer, A-P claims, and adjustments can be made with an ordinary wrench. Only the stem and valve stem are exposed to water, thus eliminating unnecessary corrosion of the parts, according to the company. It has ¼ in. pipe connections.

Dorsey Truck Trailer To Hold Below 0° F.

The Dorsey Z-RO Transport, refrigerated truck trailer capable of holding temperatures below 0° F., was exhibited at the All-Industry Show by Dorsey Trailers of Elba, Ala.

The Dorsey trailer has 6 in. of Fiberglas insulation encased in a layer of waterproof paper outside and inside, and is equipped with duckboard flooring so that cold air circulates below, as well as around the frozen foods, the company says.

An especially designed 5-ton refrigeration unit is said to hold the interior temperature to within 5° F. Controls are automatic.

The compressor is a 3-cylinder Universal Cooler type R operated at 700 r.p.m.

Two evaporator coils have a face area of 1,440 sq. in. The expansion valves have a capacity of 4 tons each.

All-Welded Oil Separators Featured by Aminco

An improved model of its "Sure-Dry" dehydrator and a line of oil separators designed for all-welded construction were shown for the first time by American Injector Co.

Major changes in the dehydrator is the protected fine mesh finger screen on the outlet end which replaces the metallic filter formerly employed. The screen consists of a fine mesh wire cloth rolled inside a "finger" of coarse screening to provide strength.

The all-welded oil separators are intended to serve as a companion line to the company's conventional models. The new separators are not equipped with removable header plates, but the welded construction permits a reduction in cost, which should open new fields for oil separators.

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Engineering
Production
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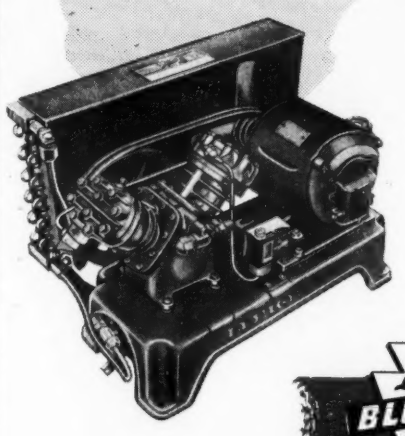

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FULL LINE TO INCLUDE UP TO 5 H. P.

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Lehigh Mfg. Co., Inc. PLANT: LANCASTER, PA.

MARVEL
Dry Beverage Cooler

39" high
30" wide
6, 8, or 10 feet long
Capacity
6'—17 cases 12 oz. bottles
8'—22 cases 12 oz. bottles
10'—28 cases 12 oz. bottles

Use it alone or with counter or bar

Get the Beverage Coolers you need Now

That's right! There's no need to wait for the beverage coolers your customers want now. Quality workmanship, with either stainless steel or baked enamel exterior, and polished aluminum interior. Heavy-duty fin-type coils insure the fastest cooling and the least frosting. Sliding stainless steel lids, which can be lifted out; 8-inch utility shelf; removable dividers inside; toe space under edges.

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Refrigeration Problems
And Their Solution

By P. B. Reed

For Service and Installation Engineers

Manager, Refrigeration and Air Conditioning Division, Perfex Corp.

Stage Compression In Refrigeration (Part 3)

In addition to the "cascade system" of two and three staging to reduce the ratio of compression per step as may be desirable or even necessary in low temperature work, another method is used that is sometimes referred to as "compound compression."

In this method, after the gas is compressed somewhat in one compressor, it is passed over to another compressor and again compressed up to a much higher pressure. In this type of system an excessively high ratio of compression may be split up into two, three, or even more steps or stages of compression each with a comparatively low compression ratio.

A previous example was given of the use of a "cascade system" to produce a -60° F. evaporator with a condensing temperature of 86° F. without excessive losses. If only one stage of compression had been used the compression ratio would have been 20 to 1, since the "Freon-12" suction pressure corresponding to -60° is 5.365 lbs. per square inch absolute (p.s.i.a.) and the discharge pressure corresponding to 86° is 107.9 p.s.i.a. (107.9 ÷ 5.365 is approximately 20).

Instead of this, two systems were used, one having an 86°, 107.9 p.s.i.a. discharge and a 5°, 26.5 p.s.i.a. evaporator, (compression ratio about 4 to 1) and another system with -60°, 5.365 p.s.a. evaporator and a 5°, 26.5 p.s.i.a. condenser (compression ratio about 5 to 1).

By using the 5° evaporator of one system to cool the condenser of the other system to 5° it was possible to split the 20 to 1 compression ratio into two ratios, one 4 to 1 and the other 5 to 1, neither of which were excessive. Consequently, it was possible to obtain the -60° temperature with reasonably good volumetric efficiencies and without excessive losses, using ordinary commercial compressors having normal production tolerances.

COMPOUND COMPRESSION

The same effect can be accomplished in compound compression by taking the discharge from the low pressure, first stage compressor and feeding it directly into the suction of the high pressure, second stage compressor thus eliminating the 5° evaporator-condenser. In so doing, there would be one -60° evaporator supplying "Freon-12" at 5.365 p.s.i.a. to the first stage compressor in which its pressure is raised to 26.5 p.s.i.a. (a compression ratio of 5 to 1) and then feeding this intermediate 26.5 p.s.i.a. pressure into the suction of the second stage compressor where it is recompressed to 107.9 p.s.i.a. (a compression ratio of 4 to 1).

In this manner the 20 to 1 compression ratio has been split into two ratios one 5 to 1 and one 4 to 1, with approximately the same results as in the cascade system, that is, with a gain of volumetric efficiency and with less loss than if single stage compression with a 20 to 1 ratio were attempted.

As was the case with the cascade system, the displacement of the first stage compressor must be large, for the 5.36 p.s.i.a. vapor from the -60° evaporator is very light and consequently the amount per cubic foot is small. After it is compressed up to the 26.5 p.s.i.a. it is considerably denser and heavier. Therefore, the second stage compressor can be much smaller, for much less displacement will be required.

It must be noted also, that with compound compression the same refrigerant must be used in all of the stages so no advantage can be taken of selecting two or more refrigerants as is possible with the cascade system.

EXAMPLE OF COMPOUND COMPRESSION

For the purpose of this example let us assume that the vapor from the -60° evaporator reaches the first stage without picking up any heat in the suction line, that is, it is not superheated.

For 1 ton of refrigeration (200 B.t.u. per minute) the displacement of the first stage compressor must be 20.7 cu. ft. per minute. After it is compressed to 26.5 p..s.i.a., its volume is reduced and its temperature is raised to 35°.

COOLING THE INTERSTAGE GAS

If this "hot" intermediate gas is fed into the suction of the second stage compressor there would be danger of burning up the valves or otherwise overheating the second stage compressor. So this 26.5 p.s.i.a., 35° "hot" gas should be cooled down to at least the saturation temperature corresponding to 26.5 and this is 5°.

This can be done in a number of ways, but a very good way is simply to bring the 5° vapor from the liquid cooler, (which will be described later) down into the intermediate stage and let it mix in with the hot 35° gas. In fact, the liquid cooler can be overfed by its expansion valve so that some unevaporated liquid gets into the interstage and, evaporating there, cools the hot interstage gas very quickly.

HIGH DISPLACEMENT IN THE FIRST STAGE

Let us assume, therefore, that the inlet gas to the second stage compressor is 26.5 p.s.i.a. and at 5° and is, therefore, saturated. Then its density will be .6735 lbs. per cubic foot, or conversely its volume will be 1.485 cu. ft. per pound. The additional vapor from the liquid cooler will be added to the 4.8 cu. ft. per minute coming from the discharge of the first stage compressor, making a total of approximately 6.4 cu. ft. per minute.

So the second stage compressor must have a displacement of 6.4 cu. ft. per minute if it is to pump enough gas to provide for refrigeration at the rate of 1 ton per 24 hours which is the same as a rate of 200 B.t.u. per minute.

The 26.5 p.s.i.a. gas is compressed and its pressure raised to 108 p.s.i.a. in the second stage compressor and, of course, becomes heated during compression so that it comes out of the second stage at about 101°.

COOLING THE LIQUID REFRIGERANT

In the water-cooled condenser this hot gas is cooled to 86° which causes it to condense at a pressure of 108 p.s.i.a. The liquid thus produced could be fed directly to the expansion valve on the -60° evaporator, but let us see what would happen if this were done.

Assuming that the liquid could warm up to 90° by the time it got to the expansion valve on the 60° evaporator, it would then have a "heat of liquid" of 28.7 B.t.u. per pound. The heat in the -60° vapor is 71.13 B.t.u. per pound, leaving a net refrigerating effect or actual refrigerating ability in the liquid of 42.43 per pound, so 4.71 lbs. per minute (200 ÷ 42.43) would have to be evaporated in the -60° evaporator and pumped by the compressors in order to furnish refrigeration at the rate of 1 ton per 24 hours which is the same as 200 B.t.u. per minute. Since the -60° vapor has a volume of 6.516 cu. ft. per pound, at -60° the 4.71 lbs. per minute would require a displacement of 30.7 (4.71 × 6.516).

REDUCING THE DISPLACEMENT BY COOLING THE LIQUID

But earlier we allowed only 20.7 cu. ft. per minute displacement. Why was this?

Simply that instead of feeding the warm 90° liquid directly to the expansion valve on the -60° evaporator, we first cooled it to 0° in a "liquid cooler." This reduced the heat of liquid from 28.7 B.t.u. per pound to 8.25 B.t.u. per pound, so that, of the heat of the vapor of 71.13 B.t.u. per pound (at -60°) 62.88 B.t.u. per pound was left for net refrigerating work instead of only 43.43 B.t.u. per pound.

As a result only 3.18 (200 ÷ 62.88) pounds per minute had to be evaporated in the -60° evaporator, and the first compressor had to have a displacement of only 20.7 cu. ft. per minute (6.516 × 3.18) instead of 30.7. This is a very sizeable saving in size of the compressor of about one third, just by cooling the liquid 90° by removing 20.45 B.t.u. per pound from it.

(To Be Continued)

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WATER and LIQUID COOLING...
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HEAT-X Features: No freeze-up damage . . . More BTU's per watt . . . No short cycling . . . Small refrigerant charge . . . Assured sanitation . . . Operates in any position . . . Small space required . . . Low initial cost . . . Long life.

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REFRIGERATION AND Air Conditioning Engineer experienced in selecting equipment, making layouts, and pricing complete Commercial Refrigeration and Air Conditioning jobs wanted by ADVANCED REFRIGERATION & APPLIANCE CORP., 5624 Penn Ave., Pittsburgh, Pa., large General Electric Distributors. Good salary and opportunity for advancement to right man.

WILL PAY top wages, mileage, and commissions to refrigeration service engineer fully qualified and experienced in market and restaurant equipment. Excellent opportunity for advancement with large firm established 23 years. Write for appointment, giving qualifications. HAINES FOOD MACHINES, INC., 622 South Main St., Dayton 2, Ohio.

WANTED: EXPERIENCED erection and service mechanic capable of taking full charge of installations and service, handling about 15 men. Must know Ammonia and "Freon." Good steady, well paying, job for right man. Apply by letter giving experience, education, etc. RICHARDSON & RICHARDSON, INC., 88-90 Park Ave., Nutley 10, N. J.

WANTED PRODUCTION engineer superintendent for producing coolers and cases, must understand wood and metal construction, make drawings, train men, be experienced in all plant operations, have successful record, old firm centrally located. Give qualifications, etc. BOX 2086, Air Conditioning & Refrigeration News.

WANTED REFRIGERATION engineers. Excellent opportunity for men with experience in the design of hermetic and open type condensing units. Also need test and service engineers. Write giving full particulars on experience and education. Location—Ohio. BOX 2105, Air Conditioning & Refrigeration News.

EXPERIENCED, SUCCESSFUL, refrigeration and air conditioning sales engineer or graduate engineer with other sales experience wanted by midwestern York distributor. Age 25 to 35. Prefer man with rural or small-town midwestern background. Organization established 13 years is leader in its field. Write fully. BOX 2116, Air Conditioning & Refrigeration News.

EQUIPMENT FOR SALE

6 HOLE ICE CREAM freezer, slit doors, sealed liner and hull, 5 inches installation. Stainless steel top, immediate delivery, ACCURATE SHEET METAL CO., 837 Tilden St., Bronx, New York City.

WATER COIL for air conditioning by cold water—25 ton capacity—A1 condition. $500 f.o.b. AIR CONDITIONING PRODUCTS CO., 1300 West Fifth Ave., Gary, Ind.

SECTIONAL WOOD walk-in storage boxes, 4 in. fiber glass insulation, fir exterior, spruce interior, automatic locks, steel saddle step. Built to specified size. Seven day delivery, $1.27 per sq. ft. f.o.b. New York. Large stock Blowers, Coils on hand. LEONARD BERGMAN, 150-19 Liberty Ave., Jamaica, N. Y. Jamaica 6-1733.

16 & 21 cu. ft. freezers, glass or hinged doors, stainless top. Superstructure freezer, open type $450.00 fluorescent, menu-panel, mirror, tank-liner. Also new model double-glass-sided freezers with refrigerated dividers. Twin-stage ½ HP unit, less motor with each cabinet. COLDIN, 1342 Webster Ave., Bronx, N. Y.

IMMEDIATE DELIVERY—New Air Conditioning Equipment. Weathermakers complete with motor, "Freon" coil, etc. 2 ton to 25 ton. SWSI, DWDI, and Twin Centrifugal Blowers, Propeller Fans, Heating and Cooling Coils, Evaporative Condensers, Self-Contained Air Conditioning Units. CONTROLDTEMP EQUIPMENT SALES CO., 236 Butler St., Brooklyn 17, N. Y.

FOR SALE: 10,000 new aluminum ice cube trays in three popular sizes. Also air-cooled and water-cooled remanufactured condensing units ¼ up to 2 hp. Write for particulars. EDISON COOLING CORP., 310 E. 149th St., Bronx 51, N. Y.

IMMEDIATE DELIVERY: Freezers 21-cu. ft. open 20-cu. ft. glass top 20 to 44 cu. ft. All aluminum open and closed. Hinged stainless steel tops. Storage boxes wood and metal. All steel bottle coolers, reach-ins, ice cream cabinets, dairy boxes. FRIGITEMP CORP., 931 Bergen St., Brooklyn, N. Y. MA-29093.

NEW TEMPRITE room air conditioners suitable for office or small store. Rating—2.5 tons or 32,000 B.t.u. per hour. Self-contained, water-cooled condensing unit, all operating controls, 220 V. Single or three phase operation. Price each $775, discount for quantity. Immediate delivery. INTERSTATE APPLIANCE CO., INC., 600 Broadway, New York. Walker 5-2755.

FOUR 2-hp. 115 D.C. Wagner Motors in original crates. Sell or exchange for A.C. motors same capacity. MEEGAN & NIELSON, 436 6th Ave., Brooklyn, N. Y. Phone South 88686.

THREE 2-hp. D. C. 115 Volt 1750 r.p.m. Wagner Motors, New. MEEGAN & NIELSEN, 436 6th Ave., Brooklyn 15, N. Y.

COMPRESSOR AND PARTS rebuilding—Compressor, float valves, water valves, low pressure controls, evaporators, water cooled condensers, condensing units and many other items replaced from our large stocks, or repaired upon receipt of your defective material. Send for our catalog-prices listed. REFRIGERATION MAINTENANCE CORP., 321 E. Grand Ave., Chicago, Ill.

SECTIONAL WALK-IN coolers built to specifications, week delivery. Four inch insulation and heavy duty hardware. Your choice of spruce, pine, fir, $1.20 per sq. ft. Six inch insulation for freezers, $1.40 per sq. ft. Cork insulation prices on request. F.O.B. Brooklyn. REFRIGERATION SPECIALTIES, INC., 721 Flushing Ave., Brooklyn 6, N. Y.

SEALED CROSLEY TERMINALS. Installed from the outside in a few minutes without opening the compressor. Corrects leaky terminals on all Crosley "F-12" units. Set of three $6.75 (Part No. 1020). Installation tool $1.65. Immediate delivery. Money-back guarantee. SEALED UNIT PARTS CO., 3097 Third Ave., New York 56, N. Y.

FRIGIDAIRE METER-MISER Terminals. Installed from the inside. Fits compressors with bottom-mounted terminals. (Part No. 1060.) Set of three $2.85. WESTINGHOUSE TERMINALS. Installed from the inside. (Part No. 1030.) Set of three $2.85. SEALED UNIT PARTS CO., 3097 Third Ave., New York 56, N. Y.

NORGE CHECK VALVES. For open-type units. (Part No. 1040.) $2.55 each. SEALED NORGE terminal, packing washers. For repairing leaky terminals. Installed from the outside in a few minutes. (Part No. 1050.) Three sets (9 washers) $1.00. SEALED UNIT PARTS CO., 3097 Third Ave., New York 56, N. Y.

LARGE STOCK refrigeration supplies, blowers, and equipment. All standard brands for immediate shipment. 18, 20, 30-cu. ft. upright Custom Built freezer cabinets. Stainless steel Reach-ins, beer coolers, work benches. Ice Cream cabinets. Kold-Hold truck and freezer plates. WHOLESALE DISTRIBUTORS, 150-19 Liberty Ave., Jamaica, N. Y. Jamaica 6-1733.

ONE—3-hp. Baker-Universal condensing unit complete 3 ph. 220-440 volt 60 cycle —$515. Twenty—Yoder 12 x 108 in.—$18.50. Twelve—12 x 120 in.—$21.50. Ten—12 x 72 in.—$12.95. Twelve—Dole 22 x 48 in.—$15.25. Eight—22 x 60 in.—$18.95. Six—22 x 72 in. —$22.50. Six—12 x 60 in.—$14.95. Twelve—No. 32 Sporlan Solenoid Valves Ammonia ½ in. external strainer $23.59. Two—107 Temprite Oil Separators $45.50. BOX 2115, Air Conditioning & Refrigeration News.

TWO-WEEK delivery on standard walk-in coolers and freezers. We are in a position to manufacture special sizes, also two-temperature cooler and freezer combinations. COMMERCIAL COOLER MFG. CO., 5736 12th St., Detroit 8, Mich.

FRANCHISES WANTED

PITTSBURGH DEALER and distributor desires Franchises in Allegheny County and surrounding territories for refrigerated store cabinets, air conditioning, and related lines. We maintain our own sales and service organizations. BOX 2111, Air Conditioning & Refrigeration News.

REPRESENTATIVE IN Argentina with large experience in sales and service of Air Conditioning and Refrigeration, with references, desires to represent reliable manufacturers of refrigerating equipment, controls, valves and fittings, instruments, refrigerant, hardware, and tools. BOX 2114, Air Conditioning & Refrigeration News.

BUSINESS OPPORTUNITIES

REFRIGERATION WAREHOUSE, walk-in refrigerators, ice-making plants, air conditioning units for immediate delivery. BOX 2117, Air Conditioning & Refrigeration News.

MISCELLANEOUS

EXPERT VALVE needle grinding service. New and used needles precision ground. CONE GRINDING CO., 15360 Masonic Blvd., Fraser, Mich.

People and Products at the Show

(Photographs on this page by Austin Jones and Irving Alter)

The American Coils Co. "Food Conditioner" gains the attention of this group, which includes (l. to r.) J. Rasmussen, American Coils; R. L. Hinshaw, Hinshaw Supply Co., San Francisco; H. Raskin, American Coils; Geo. H. Nelson, Ansul Chemical Co.; and Wm. Davidson, Hinshaw Supply.

Detroit Lubricator Co.'s staff surround a visitor to the exhibit. L. to r. are Jack Strauss, Ted Coggin, Roland M. Bixler, J.B.T. Instruments Co., New Haven, Conn.; Frank Carter, and T. C. McKee, Jr.

Some idea of how the crowds jammed the exhibits at the All-Industry Exposition may be gained from this shot of the Penn Electric Switch Co. booth, where the new "270" line of Penn controls were on display. Recognizable near left corner is R. H. Luscombe, sales manager of the company.

Seven new or completely modernized pieces of commercial refrigerator equipment were exhibited in the Jordon Refrigerator Co. booth including frozen food dispensers of various types, reach-in refrigerators, and beverage coolers. In the picture are Harry Hanover, John Percham, and Maurice Zatko, all of Jordon, and an unidentified show visitor.

(Left) Lionel MacDuff, North Shore Electric, Lynn, Mass., gets lowdown on Monsanto Santocel insulation from Richard T. Clark. (Right) Talking it over in the Minneapolis Showcase booth are Carl Nevinger, Greenville, Ill.; H. J. Hedrick, Mills Industries, Inc.; A. M. Rohr, Stangard-Dickerson Corp.; and F. E. Jernberg, Minneapolis.

(Left) Frank Malbridge of Minneapolis-Honeywell demonstrates the new locker plant temperature recorder. (Right) To see the Brunswick-Balke food and beverage combination cooler S. E. Trackman, Refrigeration Sales Corp., Cleveland, and Tom Millott, Conditioned Air, Inc., St. Paul, confer with H. D. Graves of Brunswick-Balke.

BOTH THESE PIECES OF TUBING ARE THE SAME—*in surface area*

The one-inch length of Wolverine Trufin* —the integral finned tube—(with 7 fins per inch) has the same surface area as the long nine-inch length of plain tubing. Both are ½" O.D. What does this comparison suggest to you?

Of course, compactness, efficiency and economy.

If you want high efficiency in your heat transfer equipment, consider the many advantages the use of Trufin has for you. Our Engineering Department can draw on a wealth of experience to help you with any heat transfer plans you may be contemplating.

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Contractors' Program

(Concluded from Page 1, Column 2)

elected: Ralph W. Lampie, Richmond, Va., and F. J. Zoppel, Columbus, Ohio.

A wide variety of problems was delved into by the contractors. In reviewing past accomplishments and framing future policies, they covered such topics as unfair trade practices and unfair competition, licensing and codes, trade and labor relations, government and public relations, the small-motors and "Freon" shortages, industry statistics, group insurance, apprentice training, government surplus, and formation of local associations.

Unfair trade practices came in for considerable attention. According to the Association, it is "one of the most important problems confronting refrigeration contractors, and is being thoroughly explored with particular reference to practices of some of the dairies, frozen food concerns, and manufacturers of ice cream and beverages."

The complaint made recently by the Refrigeration Contractors Association of Northern California on certain practices of dairy and ice cream companies came up for discussion in the legislative committee's report, presented through its chairman, Mr. Edelstein.

While recognition of the work of the California group was given, it was decided that "the first step in the solution of the problem is to set up a code of ethics and business procedure for use between refrigeration contractors and other sections of our industry, and a code between refrigeration contractors and other persons living outside the industry.

"After that program is completed, and voluntary compliance with these codes shall not be forthcoming, if unfair competition and unfair trade practices continue to exist, then the NARC would endeavor to have such regulations enforced by the responsible government bodies."

It was reported by the legislative committee that 132 selected cities had been asked for information on refrigeration codes and licensing provisions and that returns indicated only a few cities had either. The committee recommended that a suggested licensing code be prepared to satisfy requests for them, with the technical portion based on the refrigeration code of the American Standards Association and the American Society of Refrigerating Engineers.

Another matter occupying attention of the contractors was that of trade relations. Following a meeting between the trade relations committees of NARC and the Refrigeration Equipment Wholesalers Association, at the invitation of the latter, NARC recommended to REWA that:

1—The word "service man" in its "Statement of Policy" should be changed to "contractor" as defined by NARC. 2—The statement, "other recognized trade outlets" be clearly defined and limited in its interpretation so that such outlets shall be on a refrigeration contractor level. 3—Its members should not do trade shop repair work.

4—Members of REWA distribute list price catalogs only, and with trade discount sheets distributed only to carefully screened trade mailing lists. 5—Members of REWA display a sign, "We sell at wholesale only." 6—REWA or its members expeditiously handle correspondence from refrigeration contractors.

With regard to new members, NARC said the convention was "most gratifying" in the number of contractors from all parts of the nation applying for membership. In addition, it said, many local associations soon will be organized, judging from comments heard at the convention.

W. L. Drake, chairman of the membership committee, stated that NARC will conduct a membership drive in the 92 cities having over 100,000 population. He said NARC now has nearly 800 members in over 100 cities in 35 states, the District of Columbia, and the Panama Canal Zone, and 17 local-association affiliates.

W. R. Kromer, chairman of the committees on labor relations and government surplus, emphasized (in reports read in his absence) that NARC is neutral on the union problem but that it is working for recognition of refrigeration contracting as a separate craft, with its own union for employers of union labor. He warned contractors against setting a pattern by signing agreements somewhat unfavorable to employers and pointed out that consideration is being given to a suggested general labor agreement with management protective clauses, leaving the other points to be adjusted by each group according to local conditions.

On government surplus, Mr. Kromer said NARC had explored the matter through shifting policies and four changes in administrative heads of the War Assets Administration and sent personal letters to the 54 WAA offices and the 31 RFC offices. Results so far, he declared, have not been very encouraging.

Perishable Foods--

(Concluded from Page 1, Column 4)

kets, and finally to the self-service markets.

In self-service establishments, perishable goods were at a definite disadvantage to canned goods because they were not packaged in consumer sizes, he said.

However, food merchandisers, refrigeration equipment manufacturers, processors, automatic package machinery people, and companies who furnish packaging materials have conducted a number of experiments over the past eight years to provide prepackaged perishable food in consumer sizes.

To illustrate one such experiment, Mr. Behnken showed a color film made by the Western Growers Association of Los Angeles on the Columbus, Ohio, experiment, which has been in progress for the past three years. This experiment was started to eliminate the 25% waste in marketing perishable foods.

In the discussion period following his address, Mr. Behnken stated that he believed that store-owners will need three times the refrigeration equipment they did in 1935. However, he advised against selling them more than their operation called for. An 11 ft. open display case with a ¾-hp. motor was recommended.

In discussing the use of display cases, he explained that frozen foods must be kept below the mirror line to get proper air circulation and refrigeration. He recommended that ice cream packages be kept one package lower than other foods.

Mr. Behnken admitted that the logical place to start prepackaging perishable foods is right on the farm.

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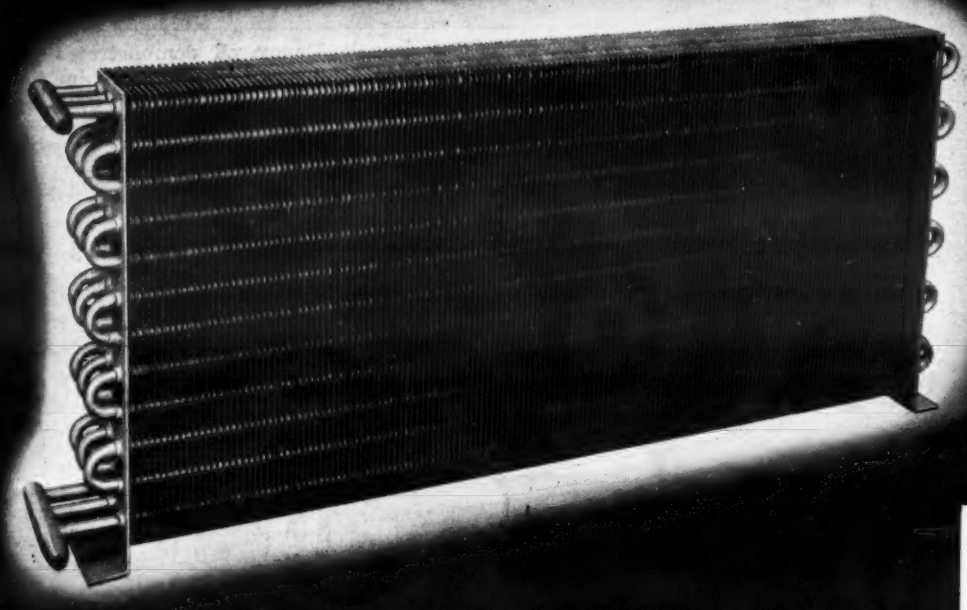

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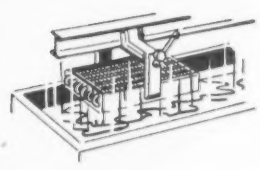
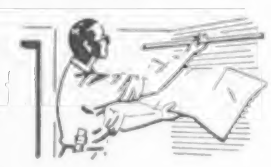
Bush HEAT TRANSFER PRODUCTS

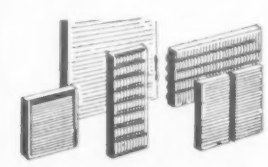
TUBING — Continuous, one-piece with no seams to give trouble. Stronger and more efficient construction.



HOT SOLDER DIPPED — makes unit one integral part. Adds to strength and protects from corrosion.



ENGINEERED — for maximum capacity in a minimum of space. Compact — yet highly efficient in performance.



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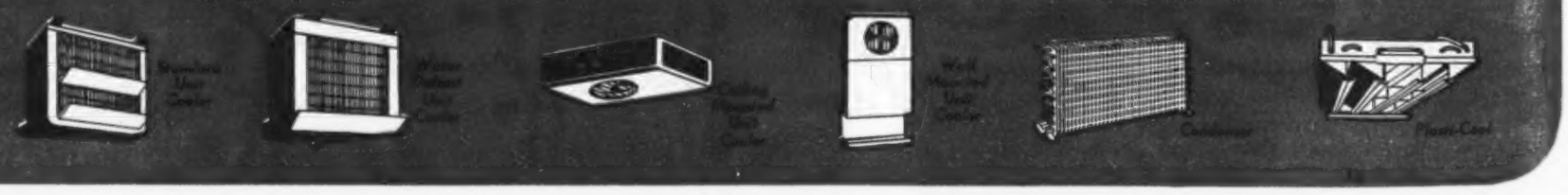
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